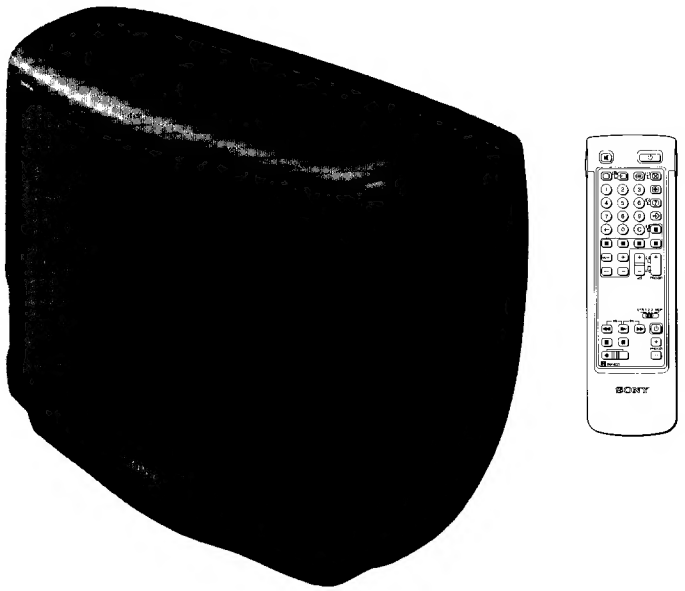
SERVICE MANUAL

BE-3B CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-B2531A	RM-833	Italian	SCC-G81Q-A
KV-B2533B	RM-833	French	SCC-G85N-A
KV-B2531D	RM-833	AEP	SCC-G77Q-A
KV-B2533E	RM-833	Spanish	SCC-G82P-A



MICROFILM

TRINITRON® COLOUR TV

SONY®

ITEM MODEL	Television System	Stereo System	Channel Coverage	Color System
Italian	B/G/H	GERMAN Stereo	PAL B/G/H VHF: E2-E12 UHF: E21-E69 CABLE TV (1): S1-S41 CABLE TV (2): S01-S05, M1-M10 ,U1-U10 ITALIA VHF: A-H2	PAL NTSC 3.58/NTSC 4.43 (Video In)
French	B/G/H, L, I	GERMAN/NICAM Stereo	PAL B/G/H VHF: E2-E12 UHF: E21-E69 CABLE TV (1): S1-S41 CABLE TV (2): S01-S05, M1-M10 ,U1-U10 ITALIA VHF: A-H2 SECAM L VHF: F02-F10 UHF: F21-F69 CABLE(France) VHF: B-Q UHF: S21-S41 I UHF: B21-B69	PAL, SECAM NTSC 3.58/NTSC 4.43 (Video In)
AEP	B/G/H, D/K	GERMAN Stereo	PAL B/G/H VHF: E2-E12 UHF: E21-E69 CABLE TV (1): S1-S41 CABLE TV (2): S01-S05, M1-M10 ,U1-U10 ITALIA VHF: A-H2 SECAM D/K VHF: R01-R12 UHF: R21-R60	PAL, SECAM NTSC 3.58/NTSC 4.43 (Video In)
Spanish	B/G/H	GERMAN/NICAM Stereo	PAL B/G/H VHF: E2-E12 UHF: E21-E69 CABLE TV (1): S1-S41 CABLE TV (2): S01-S05, M1-M10 ,U1-U10 ITALIA VHF: A-H2	PAL, SECAM NTSC 3.58/NTSC 4.43 (Video In)

MODEL	Italian	French	AEP	Spanish
Power Consumption	88W	88Wh	87W	87W

Specifications

Picture tube — Super Trinitron
Approx. 63 cm (25 inches)
(Approx. 59 cm picture measured diagonally)
110° -deflection

Input/Output Terminals

[REAR]

1 21-pin Euro connector (CENELEC standard)
- Inputs for audio and video signals
- inputs for RGB
- outputs of TV video and audio signals

2/S 2 21-pin Euro connector
- inputs for audio and video signals
- inputs for S video
- outputs for audio and video signals (selectable)

[FRONT]

3 Video input - phono jack
3 Audio inputs - phono jacks
3 S video input - 4-pin DIN
Ω Headphone jack - Stereo minijack

Sound output — 2x30W (Music power)
Approx. — 663 x 506 x 507 mm
Weight — Approx. 36 kg

Supplied accessories — RM-833 Remote Commander (1)
IEC designation R6 battery (1)
Other features — Fastext/TOP-Text
Nicam

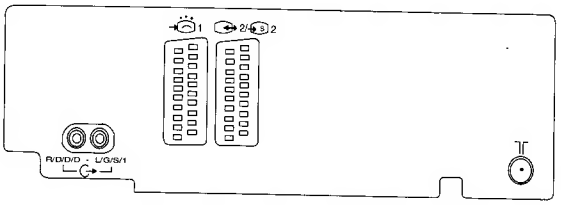
[RM-833]

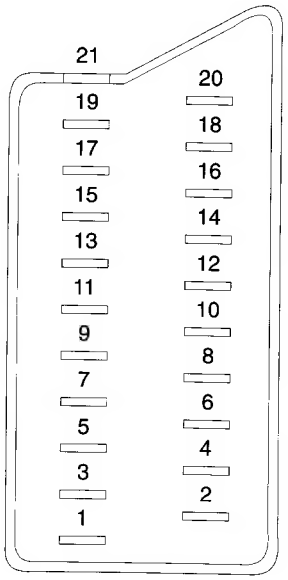
Remote control system — infrared control
Power requirements — 1.5V dc
1 battery IEC designation
R6 (size AA)
Dimentions — Approx. 65 x 222 x 21 mm (w/h/d)
Weight — Approx. 157g (Not including battery)

Design and specifications are subject to change without notice.

Item \ Model name	KV-B2531A	KV-B2533B	KV-B2531D	KV-B2533E
Pal Comb	OFF	OFF	OFF	OFF
PIP	OFF	OFF	OFF	OFF
RGB Priority	ON	ON	OFF	OFF
Scart 1	ON	ON	ON	ON
Scart 2	ON	ON	ON	ON
Front in (3)	ON	ON	ON	ON
Scart 4	OFF	OFF	OFF	OFF
Projector	OFF	OFF	OFF	OFF
AKB in 16:9 mode	ON	ON	ON	ON
Norm B/G/H	ON	ON	ON	ON
Norm I	OFF	ON	OFF	OFF
Norm D/K	OFF	OFF	ON	OFF
Norm AUS	OFF	OFF	OFF	OFF
Norm L	OFF	ON	OFF	OFF
Norm SAT	OFF	OFF	OFF	OFF
Norm M	OFF	OFF	OFF	OFF
TOP-Text	ON	ON	ON	ON
Nicam stereo	OFF	ON	OFF	ON
Language Preset	Italian	French	German	Spanish

21 pin connector (→1 / →2)





Pin No	1	2	Signal	Signal level
1	○	○	Audio output B (right)	Standard level: 0.5Vrms Output impedance:less than 1kohm*
2	○	○	Audio input B (right)	Standard level:0.5Vrms Input impedance:More than 10kohms*
3	○	○	Audio output A (left)	Standard level:0.5Vrms Output impedance:less than 1kohm*
4	○	○	Ground (audio)	
5	○	○	Ground (blue)	
6	○	○	Audio input A (left)	Standard level:0.5Vrms Input impedance:More than 10kohms*
7	○	●	Blue input	0.7V±3dB, 75ohms, positive
8	○	○	Function select (AV control)	High state (9.5—12V):Part mode Low state (0—2V):TV mode Input impedance:More than 10kohms Input capacitance:Less than 2nF
9	○	○	Ground (green)	
10	○	○	Open	
11	○	●	Green	Green signal:0.7V±3dB. 75ohms, positive
12	○	○	Open	
13	○	○	Ground(red)	
14	○	○	Ground (blanking)	
15	○	—	Red input	0.7V±3dB, 75ohms, positive
	—	○	(S signal) croma input	0.3V±3dB, 75ohms, positive
16	○	●	Blanking input (Ys signal)	High state (1—3V) Low state (0—0.4V) Input impedance:75ohms
17	○	○	Ground (video output)	
18	○	○	Ground (video input)	
19	○	○	Video output	1V±3dB, 75ohms, positive Sync:0.3V(–3, +10dB)
20	○	—	Video input	1V±3dB, 75ohms, positive Sync:0.3V(–3, +10dB)
	—	○	Video Input/Y (S signal)	1V±3dB, 75ohms, positive Sync:0.3V(–3, +10dB)
21	○	○	Common ground (plug, shield)	

○ Connected ● Not Connected (open) * at 20Hz - 20kHz

Pin No	Signal	Signal level
1	Ground	
2	Ground	
3	Y (S signal) input	1V ± 3dB 75 ohm , positive Sync. 0.3V -3/+10 dB
4	C (S signal) input	0.3V ± 3dB 75 ohm , positive Sync.

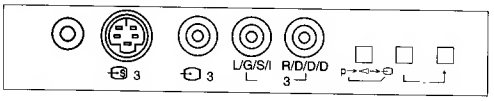


TABLE OF CONTENTS

CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

ATTENTION

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

WARNING !!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.

THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

ATTENTION !!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE.

LE CHÁSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND, IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

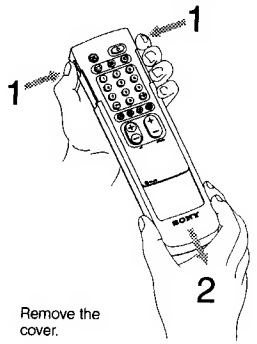
ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET PAR UNE MARQUE ⚠ SUR LES VUES EXPLOSÉES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE PUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY.

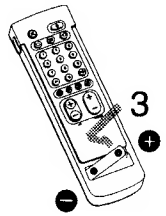
SECTION 1 GENERAL

Getting Started

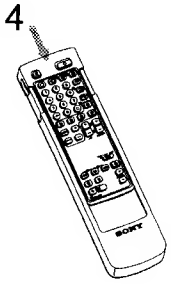
Inserting the Battery Into the Remote Commander



Remove the cover.



Check the correct polarity.



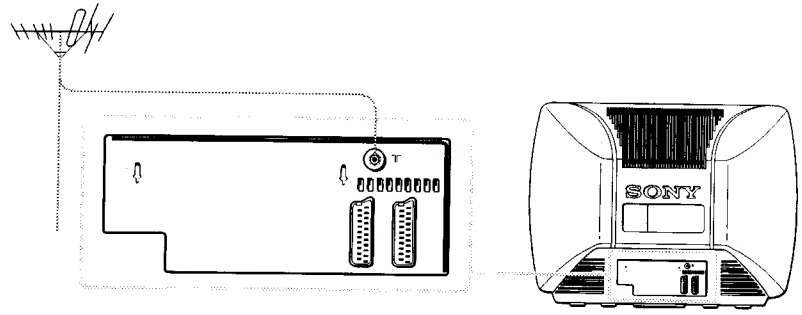
Refit the outside cover making sure that the Full Function side is visible.

About Battery Life
Under normal operation, a battery will last up to half a year.

Always remember to dispose of used battery in an environmental friendly way.

Connecting the Aerial

Connect the aerial to the "ANT" socket at the rear of the TV. (cable not supplied)



The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

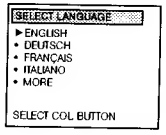
Choosing a Language

(See inside of front cover and back cover)

1 Depress ⏻ A on the TV.
The TV turns on. If the standby indicator B on the TV is lit, press ▢ 0 or any number button 0 on the Remote Commander.

2 Press MENU 7 on the Remote Commander.
The SELECT LANGUAGE screen appears. (MENU)

3 Press one of the colour buttons 1 on the Remote Commander to select a language (Press the white button 0 to display other language alternatives). The SELECT LANGUAGE screen clears and all subsequent menus appear in the chosen language.



Note: From the second time when you turn on the TV, the MENU screen appears instead of the SELECT LANGUAGE screen. Press the yellow button 1 then press the white button 0 to redisplay the SELECT LANGUAGE screen.

Tuning in to Channels

You can tune in up to 100 channels to programme positions either automatically or manually.

auto tuning:	A single button press allows all receivable channels to be tuned. Use if you are unfamiliar with the channel numbers of stations.
manual tuning:	Use if you are familiar with the channel numbers of stations.

Choose the more appropriate way for you.

Tuning in to Channels Automatically

There are two possibilities for auto tuning;

A. On the TV: hold down ▶▶I E on the front of the TV for 2 seconds
Note: The button ▶▶I E for Automatic Presetting of channels is protected to prevent accidental usage. Use the tip of a pencil to press it.
or

B. On the Remote Commander: as follows

1 Press MENU 7.

2 Press the white button 0.

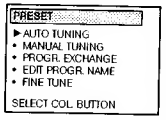
3 Hold down the red button 1 for 2 seconds.

Note: Press the green button 1 to cancel.

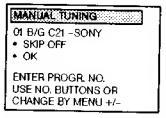
Tuning in to Channels Manually

1 Press MENU 7.
The MENU screen appears. (MENU)

2 Press the white button 0 to select PRESET.
The PRESET screen appears.



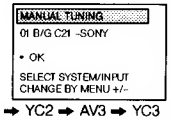
3 Press the green button 1 to select MANUAL TUNING
The MANUAL TUNING screen appears.



4 Press the number buttons ❹ or MENU +/– ❾ to select a programme position.
If you use the number buttons ❹, enter a double-digit number. (e.g. for programme number 4, first press 0, then 4)

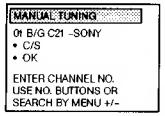
5 Press the green button ⓱.

Note: Use MENU +/– ❾ to select TV system.
You can alternatively select input sources which may be assigned to programme positions.
The display changes as follows:
B/G ➡ D/K ➡ AV1 ➡ RGB ➡ AV2 ➡ YC2 ➡ AV3 ➡ YC3



6 Pess the green button ⓱.

Note: If a video input source is selected in step 5, this is now stored.
Refer to step 4 to tune other programme positions.



7 If you have selected B/G in step 5, press the red button ⓰ to select C (regular channel) or S (cable channel).

8 Press the number buttons ❹ or MENU+/– ❾ to select the channel number.
If you use the number buttons ❹, enter a double-digit number. (e.g. for channel 23, first press 2, then 3)

9 Press the green button ⓱ to store.

Note: If you want to preset other channels, repeat steps 4 to 9.

10 Press MENU ❼ twice to return to the normal screen.

Note: You can skip unused programme positions when selecting programmes with the PROGR +/– buttons ⓯.
Press the red button ⓰ to skip in step 4. However, the skipped programmes may still be called up when you use the number buttons.

Basic TV Operations

Turning the TV on and off

Turning on
Depress ⏻ Ⓐ on the TV.

Turning off temporarily
Press ⏻ ⓲ on the Remote Commander.
The TV enters standby mode and the standby indicator Ⓑ on the front of the TV lights up.

Turning on again
Press ▭ ❸, PROGR +/– ⓯, or one of the number buttons ❹ on the Remote Commander.

Turning off completely
Depress ⏻ Ⓐ on the TV.
Note: It is recommended to use ⏻ Ⓐ to turn off the TV. This could help you save energy.

Selecting TV Programmes

Press PROGR +/– ⓯ or press the number buttons ❹.

To select a double-digit number
Press -/-- ❺, then the number buttons ❹.

Adjusting the Volume

Press ◿ +/– ⓳.

Muting the Sound

Press 🔇 ❶
To resume normal sound, press 🔇 ❶ again.

Displaying the On-screen Indications

Press ⓓ ⓬ once to display the on-screen indications.
Press again to make the indications disappear.

Operating the TV Using the Buttons on the TV

With the buttons on the TV, you can adjust or select the functions as follows:
Press ◿ +/– Ⓓ to adjust the volume.
Press P +/– Ⓒ to select programme numbers or to turn the TV on from the standby mode.
Press ⮌ Ⓕ to select the input source.
Press ⏭ Ⓔ to preset channels automatically.

Advanced TV Operations

Operating the Menu System

You can adjust picture and sound, preset channels to programme positions and utilise other convenient features by using the following menu system.

Press:	to:
1 MENU ❼ (MENU)	enter the MENU screen
2 a colour button ⓰ (■)	select an item you want to change (The selected item is marked by a triangle.)
3 MENU +/– ❾ (MENU) (+) (–)	change (or adjust) the contents of the item
4 MENU ❼	return to the MENU screen
5 MENU ❼ again	return to the normal screen
Press MENU ❼ once or twice whenever you want to return to the normal screen.	

Note: When selecting menus, the picture becomes darker. If, however, an item in the PICTURE ADJUSTMENT menu is selected, normal level of TV picture is restored to allow the best adjustment.

Adjusting the Picture and Sound

Although picture and sound are adjusted at the factory you can adjust them to suit your own taste.

1 Press MENU ❼.
The MENU screen appears. (MENU)

2 Press the red button ⓰ to select PICTURE or the green button ⓱ to select SOUND.

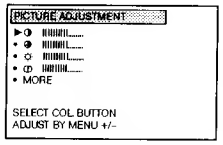
3 Press the respective colour button ⓰ to select an item.

4 Press MENU +/– ❾ to adjust.

5 Press MENU ❼ twice or wait until the menu displays disappear automatically to return to the normal screen.

PICTURE ADJUSTMENT

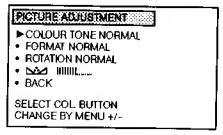
(First Page)



Press colour button	Effect
Red: For Picture ◑	Less —+— More
Green: For Colour ◕	Less —+— More
Yellow: For Brightness ☼	Darker —+— Brighter
Blue: For Sharpness ◐	Softer —+— Sharper
White:	Next page of PICTURE ADJUSTMENT

PICTURE ADJUSTMENT

(Second Page)

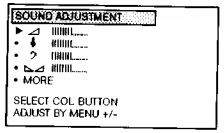


Press colour button	Effect
Red: For Colour Tone	Normal ⇨ Warm (reddish colour tone) ⇨ Cool (blueish colour tone)
Green: For Format	Normal: Normal setting 16:9 Wide screen effect
Yellow: For Picture Rotation (only for KV-B2931D)	Normal: Normal setting -5 ~ +5: Adjust the picture slant which may be caused by the earth magnetism
Blue: For Hue control (only for NTSC video signals)	Reddish —+— Greenish
White:	Back to first page of PICTURE ADJUSTMENT

Note: Press →•← ⑥ on the Remote Commander to reset to the factory preset levels for picture and sound.

SOUND ADJUSTMENT

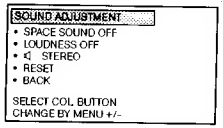
(First Page)



Press colour button	Effect
Red: For Volume	Less —+— More
Green: For Treble	Less —+— More
Yellow: For Bass	Less —+— More
Blue: For Balance	More left – more right
White:	Next page of SOUND ADJUSTMENT

SOUND ADJUSTMENT

(Second Page)



Press colour button	Effect
Red: For Space Sound	OFF: normal sound ON: for a special acoustic sound effect
Green: For Loudness	OFF: normal sound ON: when listening to low volume sound
Yellow: For Stereo/Dual	Stereo ⇨ Mono A (left channel) ⇨ Mono B (right channel) ⇨ Mono
Blue: For Reset	Resets picture and sound to the factory preset levels.
White:	Back to first page of SOUND ADJUSTMENT

Note: Press →•← ⑥ on the Remote Commander to reset to the factory preset levels for picture and sound.

Using Special Features

With your TV you can utilise special features such as Parental Lock or Sleep Timer.

1 Press MENU ⑦.
The MENU screen appears. (MENU)

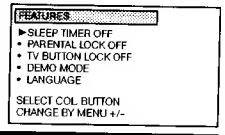
2 Press the yellow button ⑰ to select FEATURES.

3 Press the respective colour button ⑰ to select an item.

4 Press MENU +/- ⑨ to change.

5 Press MENU ⑦ twice or wait until the menu displays disappear automatically to return to the normal screen.

FEATURES



Press colour button	Effect
Red: For Sleep Timer (Automatic switch off function)	OFF ⇨ 0:30 ⇨ 1:00 ⇨ 1:30 ⇨ 2:00 (hours) After the selected time the TV set switches itself automatically into standby mode.
Green: For Parental Lock (For preventing children from watching programmes which you consider unsuitable)	OFF: Normal setting ON: The TV-channel you are watching is now blocked. In this way you can prevent undesirable broadcasts from appearing on the screen.
Yellow For TV Button Lock	OFF: Normal setting ON: The buttons on the TV do not function anymore. (The Remote Commander still operates)
Blue: For Demo Mode	ON: A sequence of menu pictures is displayed. Press any button on the Remote Commander to stop the function.
White: For Language	The SELECT LANGUAGE screen appears.

Advanced Presetting Functions

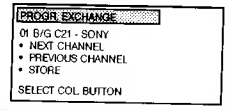
Exchanging Programme Positions

You can exchange the programme positions to a preferred order (example: exchange programme 09 (channel C21) with programme 15 (channel C24)).

1 Press MENU ⑦.
The MENU screen appears (MENU)

2 Press the white button ⑰.
The PRESET screen appears.

3 Press the yellow button ⑰.
The PROGR. EXCHANGE SCREEN appears.



4 Press the white button ⑰ repeatedly until the desired programme number (09) appears.

5 Press the red or the green button ⑰ repeatedly until the desired channel number (C24) appears.

6 Press the white button ⑰ to store.
Now the exchange has been completed. Channel C24 is tuned in to programme 09 and channel C21 is tuned in to programme 15.

7 Press MENU ⑦ twice to return to the normal screen.

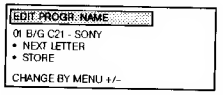
Editing Programme Names

In case of channels, which broadcast VPS signals, programme names are usually stored automatically during presetting of channels. You can also edit the programme names up to five letters.

1 Press MENU ⑦
The MENU screen appears. (MENU)

2 Press the white button ⑰.
The PRESET screen appears.

3 Press the blue button ⑰.
The EDIT PROGR. NAME screen appears.
The first character flashes.



4 Press MENU +/– ❾ to edit the first letter.
The first letter changes as follows
A ⟷ B ⟷ ... ⟷ Z ⟷ 1 ⟷ ... 9 ⟷ "–" (space).

5 Press the red button ⓯ to move to the next letter.

6 Repeat steps 4 to 5, until the fifth letter is chosen.

7 Press the green button ⓰.
The programme name is stored, and the normal screen appears. To edit another programme name, repeat steps 1 to 7.

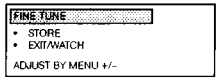
Fine Tuning

You can adjust the receiving conditions by the FINE TUNE function.

1 Press MENU ❼
The MENU screen appears. (MENU)

2 Press the white button ⓮.
The PRESET screen appears.

3 Press the white button ⓱ again.
The FINE TUNE screen appears.



4 Press MENU +/– ❾ to adjust the receiving condition.

5 Press the red button ⓯ to store the adjustment, or press the green button ⓰ not to store.
Now the normal screen appears. If you have pressed the green button, the fine tuned condition is cancelled once you choose another programme.

Note: If the FINE TUNE screen disappears automatically before you press the red button ⓯, the fine tuned condition is not stored. Repeat steps 1 to 5.

Tuning in to a Channel Temporarily

You can tune in to a channel temporarily, even when it has not been preset.

1 Press C ⓲ on the Remote Commander.
For cable channels press **C** ⓲ twice. The indication "C" (or "S" for cable channels) appears on the screen.

2 Enter a double digit channel number using the number buttons (e.g. for channel 23, first press 2, then 3).
The channel appears.
However, the channel is not stored.

Teletext Operation

TV stations broadcast teletext programmes via the TV channels. For basic operation of teletext, use the simple side of the Remote Commander. For the advanced features of teletext, use the buttons indicated in green on the full function side of the Remote Commander.

Basic Teletext Operation

Switching Teletext on and off

1 Select the channel which carries the teletext service you wish to view.

2 Press (TEXT) ⓫ to display Teletext.
If no teletext signal is broadcast, the indication P100 is displayed on a black screen.

3 Input three digits for the page number using the number buttons ❹.
The numbers are displayed on the screen and the requested page appears in a few seconds.
Note: If you make a mistake, type in any three digits, then re-enter the correct page number.

4 Press (TV) ❸ to return to the TV mode.

Notes:
• To change the teletext channels. First press (TV) ❸ to return to the TV mode, then repeat steps 1 to 3.
• If the signal of a TV channel is weak, teletext errors may occur.

Advanced Teletext Operation

Using Fastext
With Fastext you can access pages with one button press. When a Fastext page is broadcast, a colour-coded menu will appear at the bottom of the screen. The colours of this menu correspond to the red, green, yellow and blue buttons ❻ on the Remote Commander.
Press the corresponding colour button ❻ on the Remote Commander which corresponds to the colour-coded menu. The page will be displayed in a few seconds.

Requesting the Index page
Press (INDEX) ⓱. The Index page appears.

Accessing the next or preceding page
Press (PAGE –) or (PAGE +) ⓰. The next or the preceding page appears on the screen.

Superimposing the teletext display on the TV picture
Press (TEXT) ⓫ once if you are in text mode or press (TEXT) ⓫ twice if in TV mode.
To return to the normal teletext display press (TEXT) ⓫ twice.

Preventing a teletext page from being updated or changed
Press (HOLD) ❷. The HOLD symbol (HOLD) appears on the screen and the selected subpage is held until you press (TEXT) ⓫ to cancel.

Enlarging the teletext display
Press (SIZE) ⓬ once to enlarge the upper half. Press twice to enlarge the lower half.
Press again to restore the normal display.

Revealing concealed information (e.g. answers to a quiz)
Press (REVEAL) ⓭. The information is revealed. Press (REVEAL) ⓭ again to conceal the information.

Watching TV while waiting for a requested page to be displayed

1 Request a new teletext page.

2 Press (TEXT CL) ⓬.
The TV programme is displayed and the symbol (TEXT) is displayed at the top of the page.
Note: When the requested page is available the page number is displayed at the top of the screen.

3 Press (TEXT) ⓫ to view the page.

To cancel the request
Display the teletext page, then press (TEXT) ⓫. The request is now cancelled. Press (TV) ❸ to resume TV mode.

Using the Favourite Page system
You can store up to four of your favourite teletext pages per programme with the help of the Favourite page system. In this way you have quick access to the pages you watch frequently.

Storing the Favourite Pages

1 Select the page you would like to store using the number buttons ❹.

2 Press ⇢ ⓲ twice.
The colour prompts at the bottom of the screen flash.

3 Press any of the colour buttons ❻ on the Remote Commander to store the selected page.
The page is now stored on this button.

Repeat steps 1 to 3 for the other 3 pages available.

Displaying the Favourite pages

1 Press ⇢ ⓳.

2 Press the colour button ❻ corresponding to the colour prompt onto which the desired page is stored.
The page is requested. (It may take a few seconds to be received).

Note: Step 1 must be taken before every favourite page selection otherwise the normal Fastext facility operates.

Using the Time Function in the TV mode
Press (TIME) ⓲ to request the time. Press again to cancel the request.
Note: This function is available only when teletext is broadcast.

Connecting Other Equipment

You can connect optional audio/video equipment to this TV such as VCRs, video disc players, cameras or stereo systems.

Connector	Acceptable input signal	Available output signal
1 M (AV1/RGB)	Audio/video and RGB signal	Audio/video signal from TV Tuner
2/2 L (AV2/YC2)	Audio/video and S-video signal	Audio/video signal from selected source
3/3 G H (AV3)	Audio/video signal	No outputs
3/3 G I (YC3)	Audio/S-video signal	No outputs

To watch a video input picture, press ❷ until the desired video input appears.
To return to the normal TV picture, press ❷ repeatedly or press ❸.
If you have a decoder, connect it to 1 M

Connecting a VCR Using the TV Aerial Terminal

Connect the aerial output of the VCR to the aerial terminal K of the TV. It is recommended to tune in the VCR signal to programme number "0". For details, see "Tuning in to Channels Manually" on page 20.

S video input (Y/C input) I L.
Video signals may be separated into Y (luminance or brightness) and C (chrominance) signals.
Separating the Y and C signals prevents them from interfering with each other and therefore improves the picture quality (especially luminance). This TV is equipped with 2 video input terminals through which these signals can be input directly.

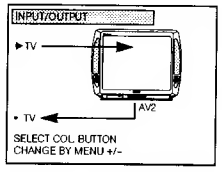
Checking and Selecting the Input and Output Sources Using the Menu

You can display a menu screen to see which input and output source are selected. You can also change the selecting using this menu.

Checking the Input and Output Sources

1 Press MENU ❼.
The MENU screen appears.

2 Press the blue button ⓯ to select INPUT/OUTPUT.
The INPUT/OUTPUT screen appears.



Selecting an Input Signal

Press the red button ⓰ to select INPUT. Press MENU +/– ❾ to select the desired input source.
You can select among the following sources:

TV ⟷ AV1 ⟷ RGB ⟷ AV2 ⟷ YC2 ⟷ AV3 ⟷ YC3

Selecting an Output Signal

The 2/2 connector L outputs the source input from the other connectors. Press the green button ⓱ to select OUTPUT. Press MENU +/– ❾ to select the desired output source.
You can select among the following sources:

TV ⟷ AV1 ⟷ AV2 ⟷ YC2 ⟷ AV3 ⟷ YC3

Note: Press ❼ twice or wait until the menu display disappears automatically to return to the normal screen.

Remote Control of Other Sony Equipment

You can use the TV Remote Commander to control most Sony remote-controlled video equipment such as: Beta, 8 mm or VHS VCRs or video disc players.

Tuning the Remote Comander to the equipment

1 Set the VTR 1/2/3 MDP selector ㉑ according to the equipment you want to control:
VTR 1: Beta or VCR
VTR 2: 8mm VCR
VTR 3: VHS VCR
MDP: Video Disc Player

2 Use the buttons ㉑ to operate the additional equipment.

Notes:
• If your video equipment is furnished with a COMMAND MODE selector: set this selector to the same position as the VTR 1/2/3 MCP selector on the TV Remote Commander.
• If the equipment does not have a certain function, the corresponding button on the Remote Commander will not operate
• When you use the ● (record) button, make sure to press this button and the one to the right of it simultaneously.

Using Headphones

You can utilise headphones. Connect them to the headphone jack J, then the sound from the speakers goes off.
Note: You can't control the sound adjustment except for volume.

For your Information

Troubleshooting

Here are some simple solutions to problems which may affect the picture and sound.

No picture (screen is dark), no sound
- Plug the TV in.
- Press ⏻ A on the TV. (If the standby indicator B is lit, press ❸ or any number button ❹ on the Remote Commander.)
- Check if the selected video source is on.
- Turn the TV off for three or four seconds and then turn it on again using ⏻ A.

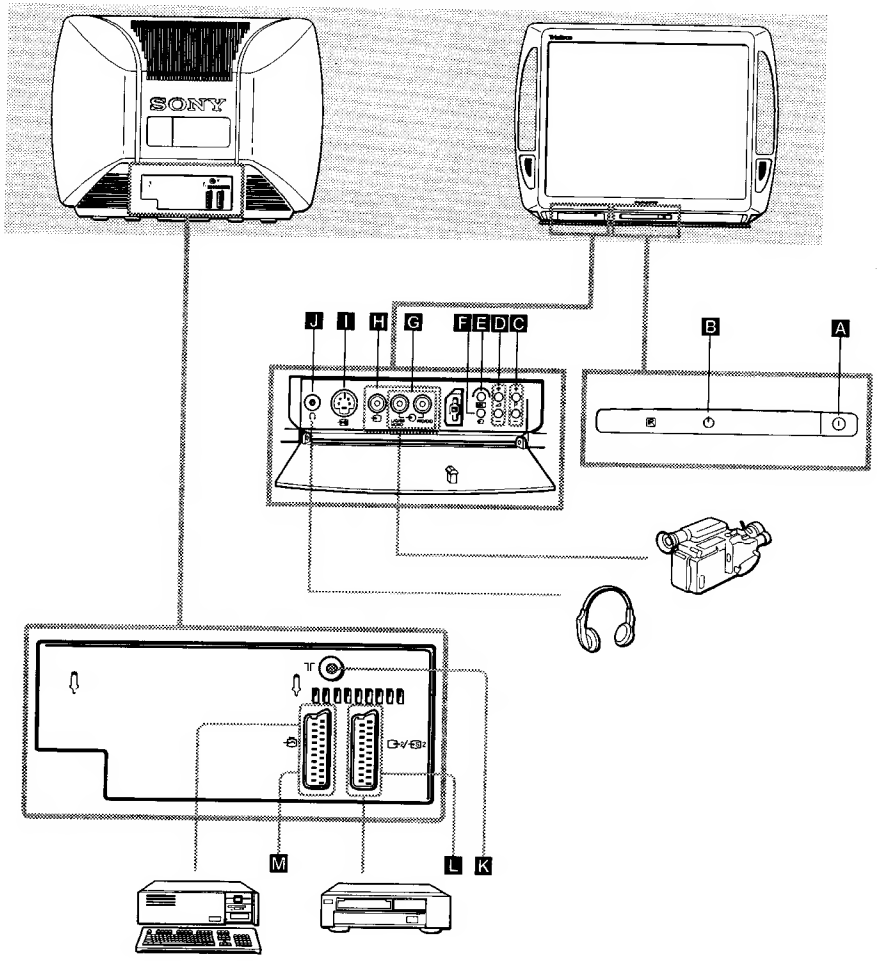
Poor or no picture (screen is dark), but good sound
- Press MENU ❼ to enter the MENU screen, and press the red button ⓰, then adjust ◑ and ☼.

Good picture but no sound
- Press 🔊 + ⓫.
- If 🔇 is displayed on the screen, press 🔇 ❶.

No colour for colour programmes
- Press MENU ❼ to enter the MENU screen, and press the red button ⓰, then adjust ◑.

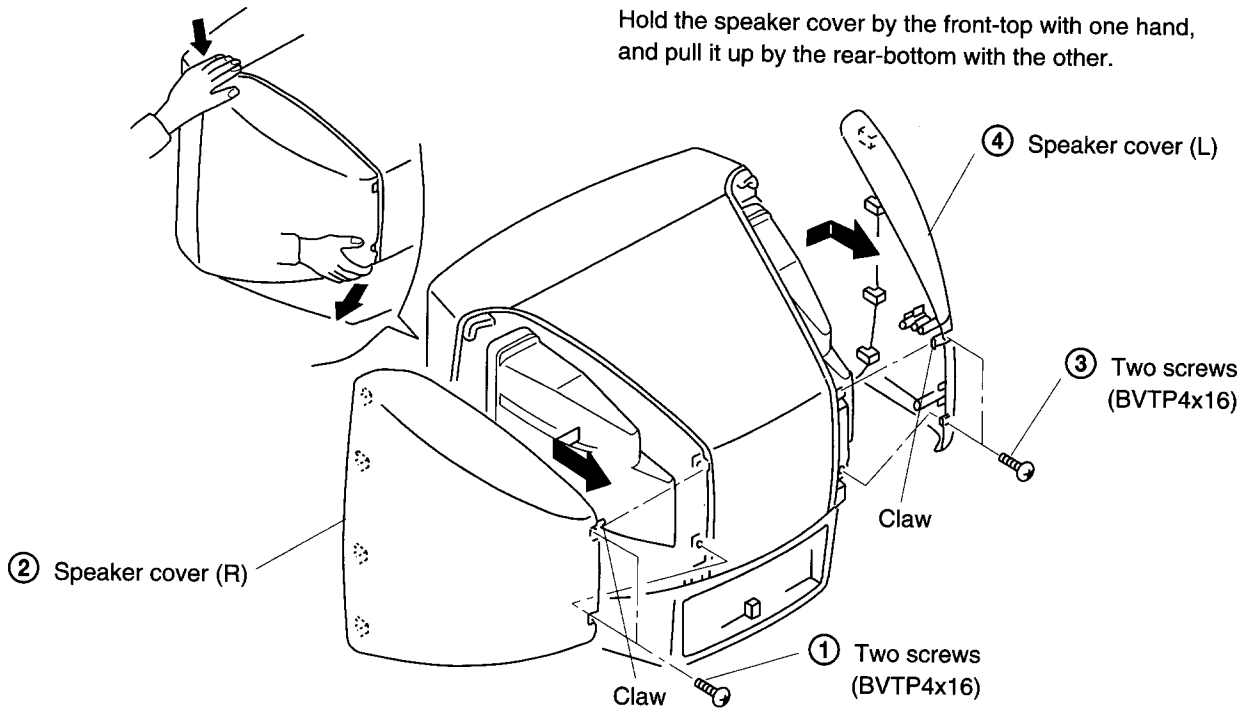
Remote Commander does not funcion
- Replace the battery.

If you continue to have problems, have your TV serviced by qualified personnel. Never open the casing yourself.

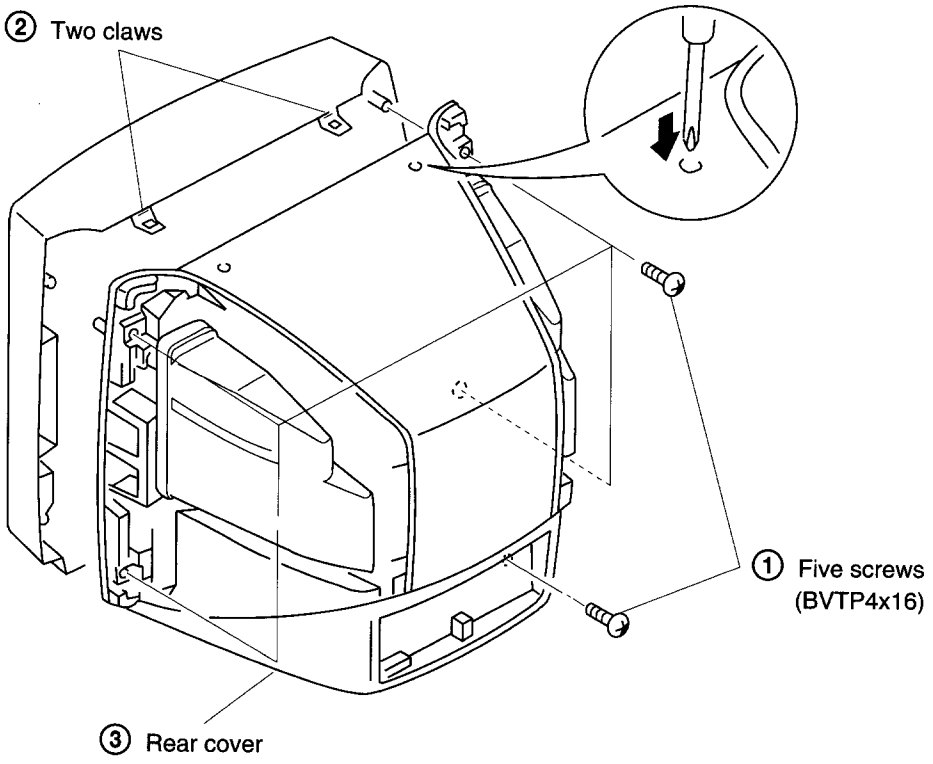


SECTION 2
DISASSEMBLY

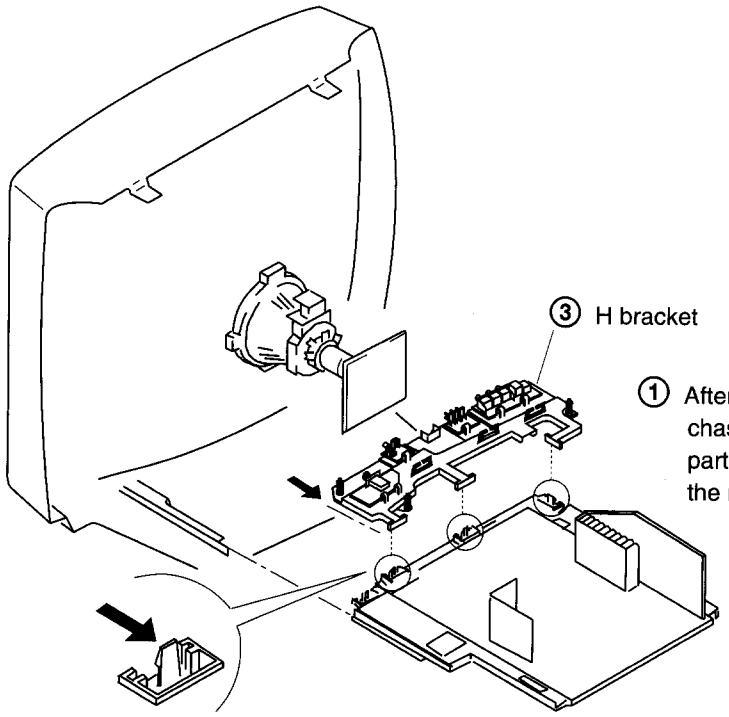
2-1. SPEAKER COVER REMOVAL



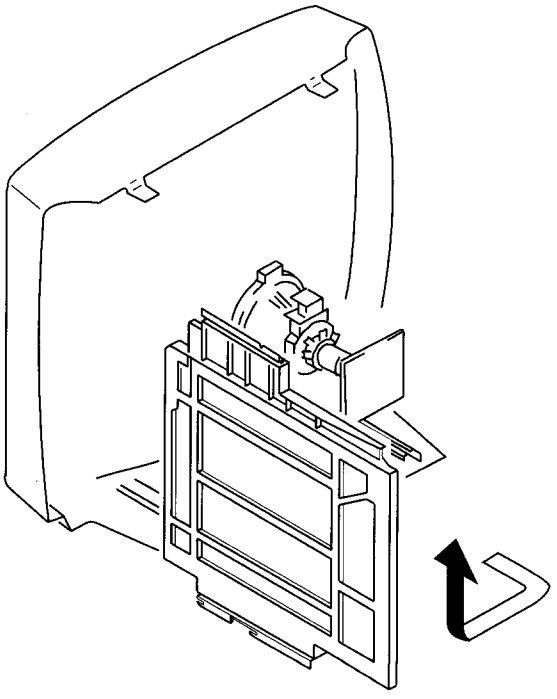
2-2. REAR COVER REMOVAL



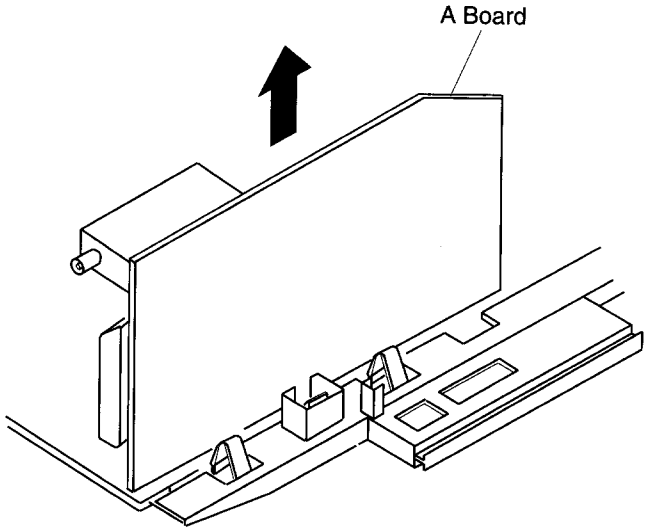
2-3. CHASSIS ASSY REMOVAL



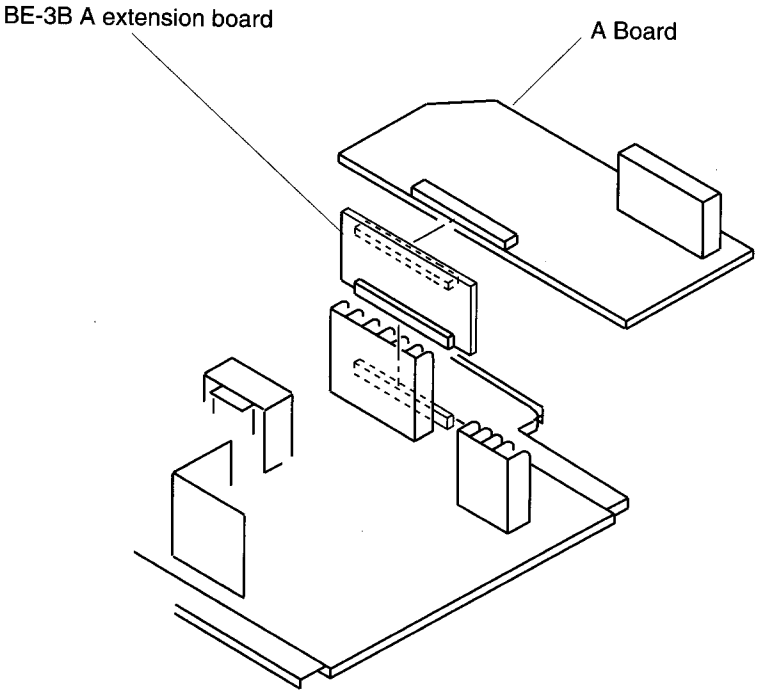
2-4. SERVICE POSITION



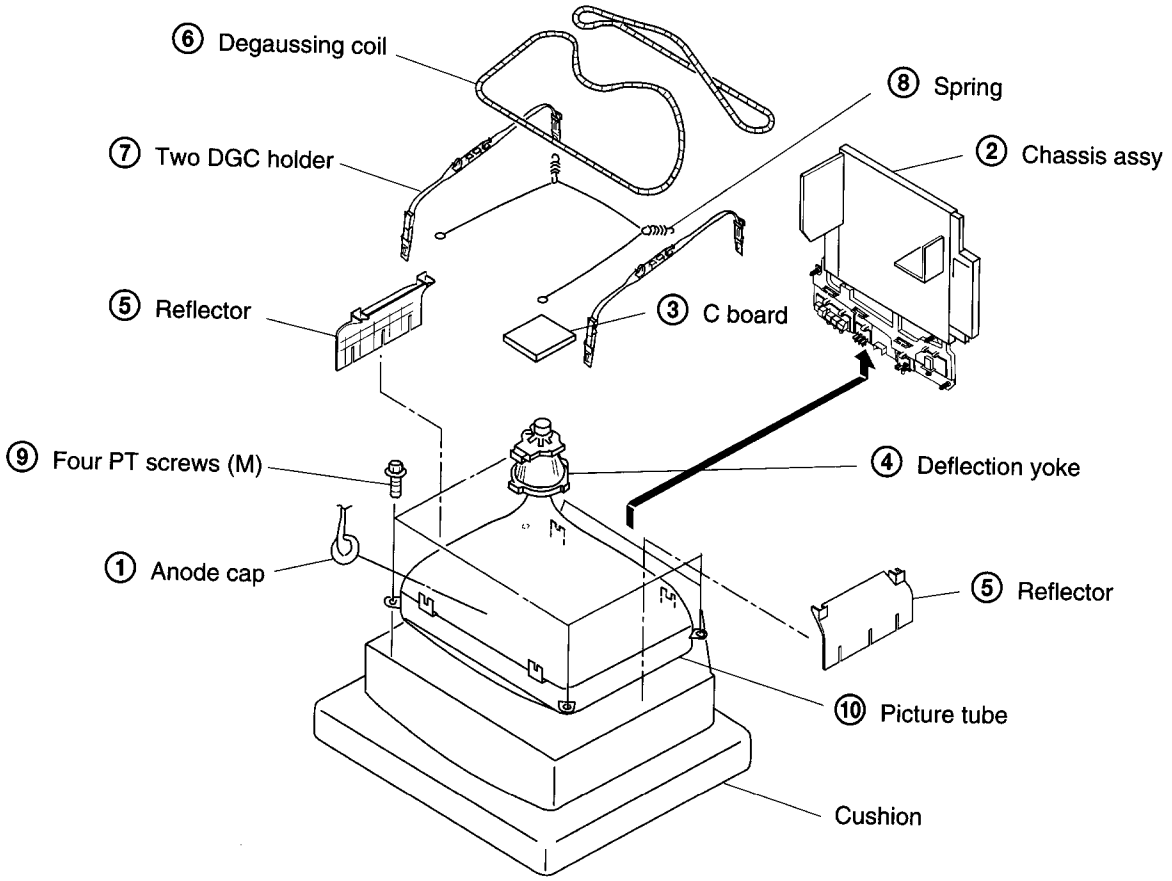
2-5. A BOARD REMOVAL



2-6. EXTENSION BOARD



2-7. PICTURE TUBE REMOVAL

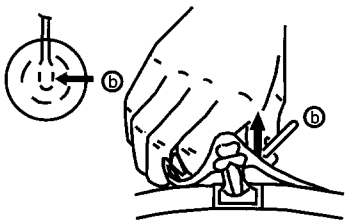


• REMOVAL OF ANODE-CAP

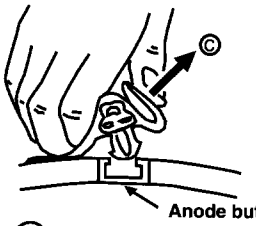
Note: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

*** REMOVING PROCEDURES.**

① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ



② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ



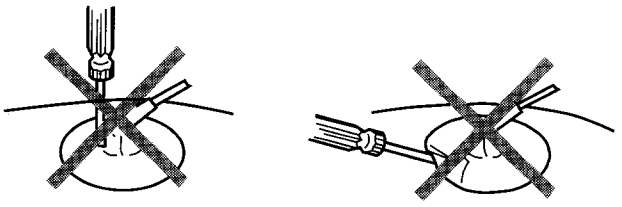
③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ⓒ

• HOW TO HANDLE AN ANODE-CAP

① Don't damage the surface of anode-cap with sharp shaped material !

② Don't press the rubber hardly not to hurt inside of anode-caps !
A metal fitting called as shatter-hook terminal is built into the rubber.

③ Don't turn the foot of rubber over hardly !
The shatter-hook terminal will stick out or damage the rubber.



SECTION 3
SET - UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there are specific instructions to the contrary, carry out these adjustments with the rated power supply.
- Unless there are specific instructions to the contrary, set the controls and switches to these settings :

◑ Contrast ..... 80% (or remote control normal)
☼ Brightness 50%

- Carry out the following adjustments in this order :

1. Beam landing
2. Convergence
3. Focus
4. White balance

Note: Testing equipment required.
1. Colour bar/pattern generator
2. Degausser
3. DC power supply
4. Digital multimeter
5. Oscilloscope

Preparation:
- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the set's power and degauss with the degausser.

3-1. BEAM LANDING

1. Input the white signal with the pattern generator.
   CONTRAST } normal
   BRIGHTNESS }
2. Set the pattern generator raster signal to red.
3. Move the deflection yoke forward and adjust with the purity control so that the red is at the centre and the blue and the green take up equally sized areas on each side. (See Fig. 3-1 - 3-3)
4. Move the deflection yoke forward and adjust so that the entire screen becomes red. (See Fig. 3-1)
5. Switch the raster signal to blue, then to green and verify the condition.
6. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws.
7. If the beam does not land correctly in all the corners, use a magnet to adjust it. (See Fig. 3-4)

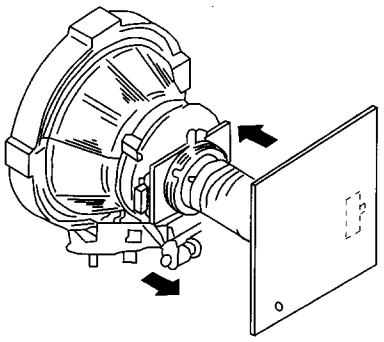


Fig. 3-1

Fig. 3-2

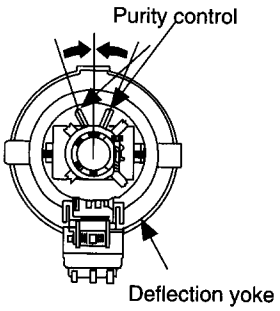
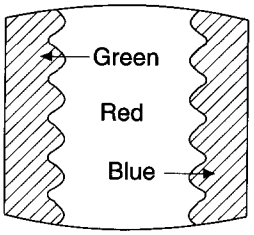


Fig. 3-3



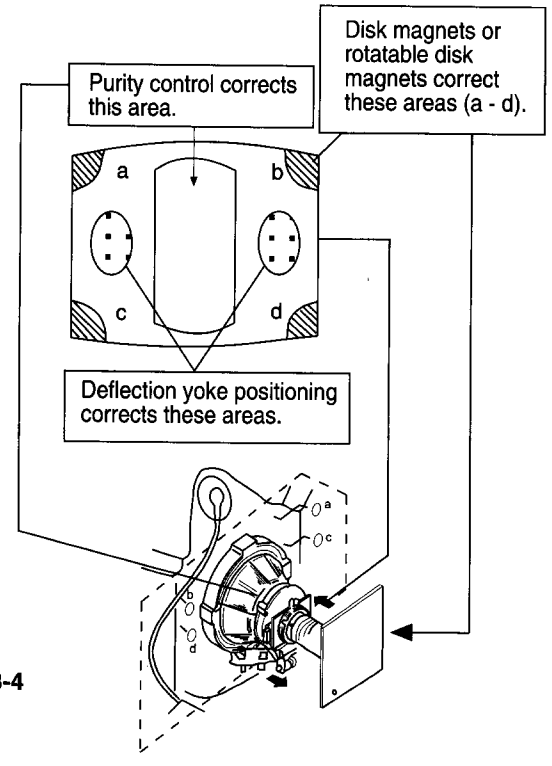


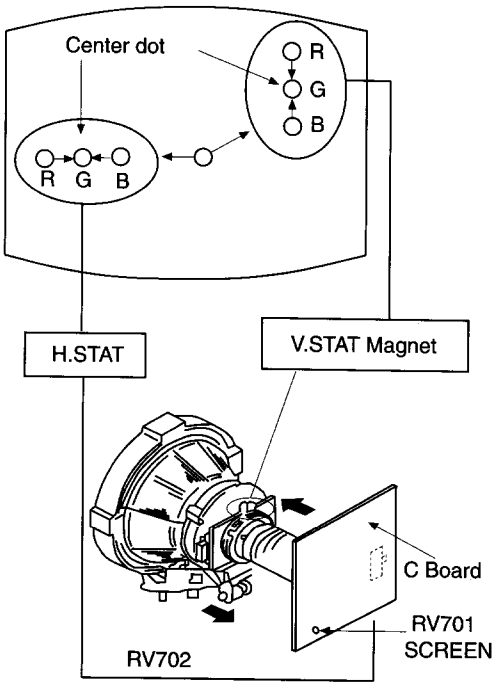
Fig. 3-4

3-2. CONVERGENCE

Preparation:

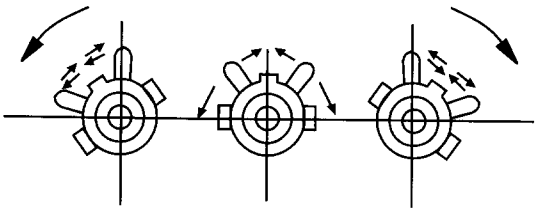
- Before starting this adjustment, adjust the focus, horizontal size, and vertical size.
- Minimize the brightness setting.
- Provide a dot pattern.

(1) Horizontal and vertical static convergence

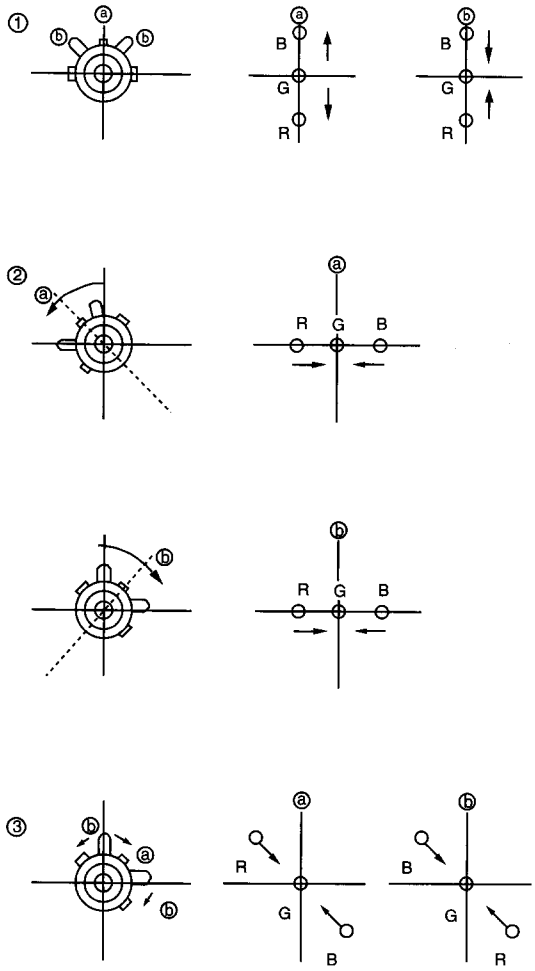


1. (Moving horizontally), adjust the H.STAT control so that the red, green, and blue points are on top of each other at the centre of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green, and blue points are on top of each other at the centre of the screen.
3. If the H.STAT variable resistor cannot bring the red, green, and blue points together at the centre of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner given below.
   (In this case, the H.STAT variable resistor and the V.STAT magnet influence each other)

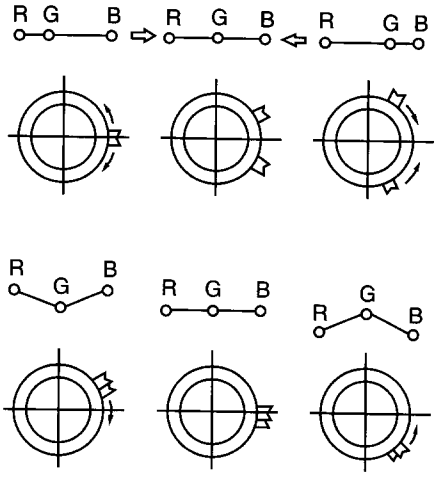
- Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.

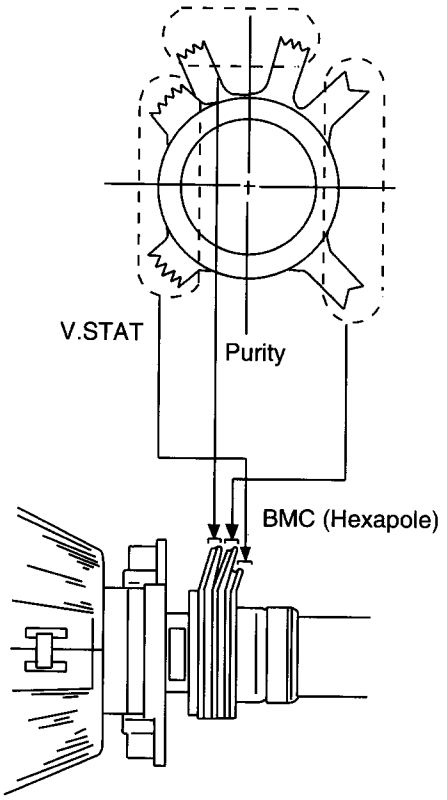


4. If the V.STAT magnet is moved in the direction of the (a) and (b) arrows, the red, green, and blue points move as shown below.



- Operation of BMC (Hexapole) Magnet





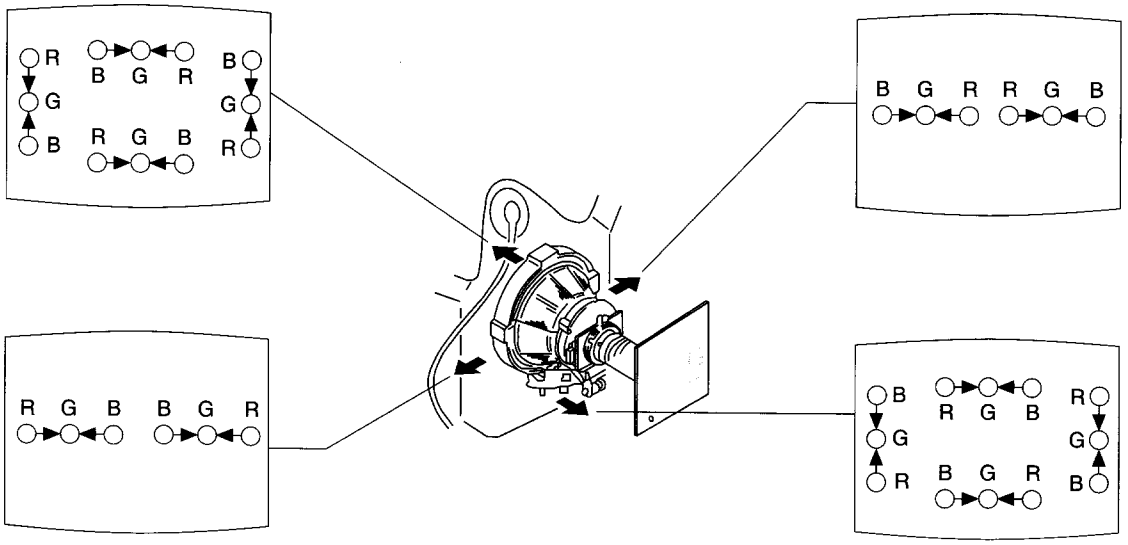
- The respective dot position resulting from moving each magnet interact, so be sure to perform adjustment while tracking.
  Use the H.STAT VR to adjust the red, green, and blue dots so they coincide at the centre of the screen (by moving the dots in the horizontal direction).

(2) Dynamic convergence adjustment.

Preparation:

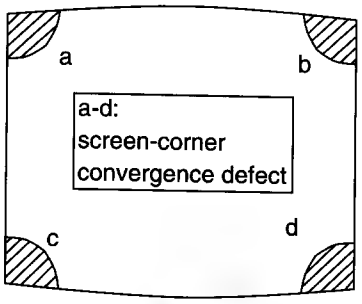
- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence.

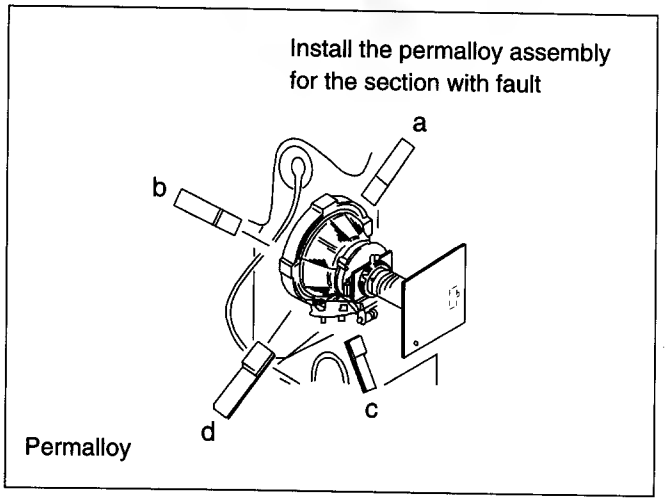
1. Slightly loosen the deflection yoke screws.
2. Remove the deflection yoke spacer.
3. Move the deflection yoke as shown in the figure below and optimize the convergence.
4. Tighten the deflection yoke screws.
5. Re-install the deflection yoke spacer.



(3) Screen corner convergence.

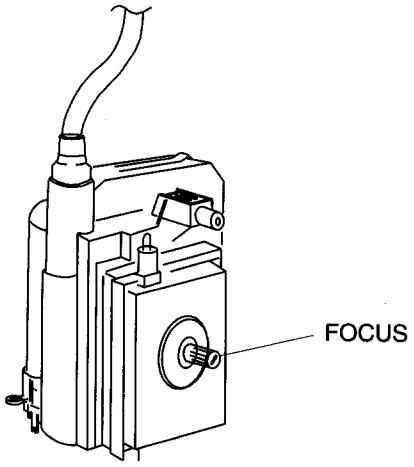
If you are unable to adjust the corner convergence properly, correct them with the use of permalloy assemblies.





3-3. FOCUS

Adjust the focus to optimize the screen.



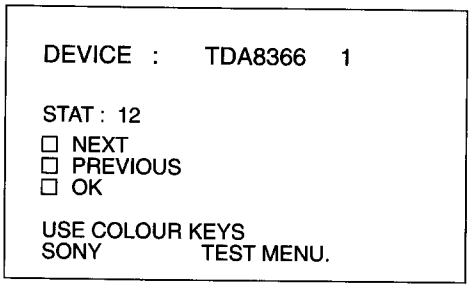
3-4. WHITE BALANCE

Screen G2 Setting

1. Input the dot signal from the pattern generator.
2. Set the picture brightness control to its lowest level.
3. Apply 180V DC to the R,G, and B cathodes with an external power supply.
4. While watching the picture, adjust G2 control RV701 (Screen) to the point just before the return lines disappear.

White balance adjustment

1. Receive an all-white signal.
2. Enter into service mode. (Refer to the section 4 "Electrical Adjustment" on how to enter service mode.)
3. Select TDA8366 1 on menu.



4. Press the White button on the Remote Commander to enter into the device Menu.
5. Press the Red button 10 times "Next" "Next" "Next" to select HWB RED, adjust to 32.
6. Press the Red button to select HWB GREEN, adjust with the + and - menu buttons so that the white balance becomes optimum.
7. Press the Red button to select HWB BLUE, adjust with the + and - menu buttons so that the white balance becomes optimum.
8. Press the TV button twice on the Remote Commander to store the data and return to TV operation.

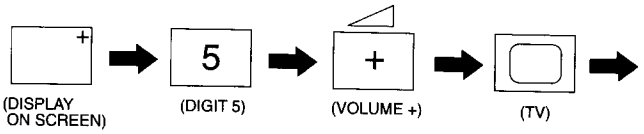
SECTION 4
CIRCUIT ADJUSTMENTS

4-1. ELECTRICAL ADJUSTMENTS

Service adjustment to this model can be performed with the supplied remote commander RM-833.

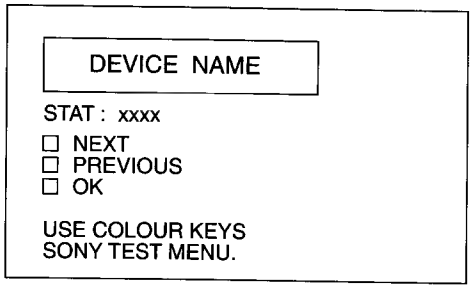
HOW TO ENTER INTO SERVICE MODE

1. Turn on the main power switch of the set and enter into standby mode.
2. Press the following sequence of buttons on the Remote Commander.

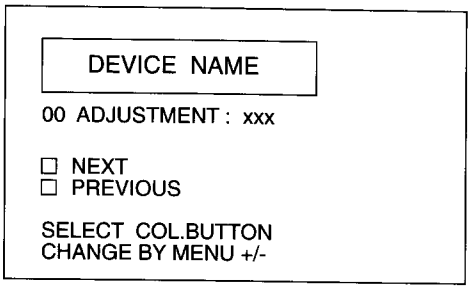


"TT " will appear in the top right corner of the screen. Other status information will also be displayed.

3. Press the MENU button on the Remote Commander to obtain the menu on the screen.



4. Press the Red (Next) and Green (Previous) buttons to select the device corresponding to the adjustment item from the table. Then press the White button (OK).



5. Press the Red (Next) or Green (previous) buttons to select the adjustment item. Then press the ▽ and △ buttons to change the data to comply with each standard.

6. Turn off the power to quit the service mode when adjustments are completed.

Initial Conditions for setup of TDA8366, TDA6612 and SAA7283. (Stereo Models Only)

TDA8366 1	INIT VALUE	TDA8366 2	INIT VALUE
Hue	31	Interlace	00
H Shift	Adj	Sync Mode	00
H Size	Adj	Col Dec	00
Pin Amp	Adj	Vert Div	00
Corn Pin	Adj	Vid ID	00
Tilt	Adj	EHT Track	01
V.Linear	Adj	En V Grd	00
V.Size	Adj	Serv Blk	00
S.Corr	Adj	OVP Mode	00
V.Cent	Adj	Aspect R	00
HWB Red	Adj	Start Freq	00
HWB Green	Adj	Y/C Input	00
HWB Blue	Adj	PAL/NTSC	00
Peaking	8	Xtal PLL	00
Bright	32	Y Delay	07
Colour	32	RGB Blk	00
Picture	37	Noise Cor	00
AGC Set	00	Fast Blk	01
Srce Sel 1	00	AFC Wind	00
Srce Sel 2	00	IF Sensty	00
Time Con	03	Mod Std	00
Xtal Ind	03	Vid Mute	01
FF Freq	02		

TDA6612	INIT VALUE	TDA6612	INIT VALUE
MPX Per	00	Mute 2	01
Quasi St	00	C1/2LS	00
Bass Exp	00	C1/2KH	00
H Pulse	00	Mono	01
Matrix St	00	Scart	00
Bypass	00	Scart D	00
Vol L Sp	07	AM	00
Vol R Sp	07	SAA7283	INIT VALUE
Vol HP	00	Mon M1/M2	01
Pll Sync	00	DM Select	01
Mute 3	01	SSWIT 123	07
Treble	08	Port 2	00
Bass	09	Mute Def	00
X Talk Adj	Adj	AMDIS	00
Mute 1	00	E Max	80
		E Min	01

4-2. TEST MODE 2 :

Is available by pressing Test button twice, OSD 'TT ' appears. The functions described below are available by pressing the two numbers. To release the Test Mode 2, press 0 twice, or switch the TV into Stand-by Mode.

00	switch Test Mode 2 off
01	picture maximum
02	picture minimum
03	Volume 35%
04	Volume 50%
05	Volume 65%
06	Volume 80%
07	Ageing Condition (Volume min., Picture max., Brightness max.
08	Shipping Condition (Analog Values are RESET due to factory setting, Prog 1 is selected, TT Mode is switched off)
09	"Menu" Flag request
10	Tenth entry is deleted
11	dummy
12	dummy
13	dummy
14	Forced AV 16:9 detection on/off
15	Read factory setting from NVM Reads Volume, Balance, Treble, Bass, Brightness, Contrast, Hue, Sharpness, Colour values from ROM to the actual used values (Last Power Memory)
16	Save actual used values as RESET values Memorize actual used values Balance, Treble, Bass, Hue, Sharpness at RESET position in NVM.
17	Preset Label for AV Sources
18	RGB Priority on/off
19	Clear all preset labels
20	Tenth entry is deleted
21	Sub Contrast
22	Sub Colour
23	Sub Brightness
24	Set destination = U RGB Priority = Off
25	Set destination = D RGB Priority = Off
26	Set destination = B RGB Priority = On
27	Set destination = K RGB Priority = Off
28	Set destination = L RGB Priority = Off
29	Set destination = E RGB Priority = Off
30	Tenth entry is deleted
31	Set Destination = A RGB Priority = On
32	dummy
33	Auto AGC
34	N/S Pin Adjust
35	Manual AGC Adjust
36	dummy
37	dummy
38	To Activate Rotation Coil Adjustment
39	'Check Rotation Coil Adjustment
40	Tenth entry is deleted
41	Re-initialise NVM
42	Production use only
43	Initialise Geom Settings
44	Initialise all favorite pages = 100
45	Channel locks = off
46	IR Channel Pressetting Mode The channel pressetting can be done by a Special IR Transmitter (Ver 2 and above software only)
47	dummy
48	Set NVM testbyte to 44h
49	Erase the NVM Testbyte (this byte detects already stored NVM's) After selecting this function, switch TV Off and On -> the NVM will be preset by µ-Controller.

In Test Mode the Menu display is switchable by the Speaker-Off button.

Note : For Test Modes 41 - 49 it is necessary to ensure that the TV is set to Prog 59.

SUB BRIGHTNESS ADJUSTMENT

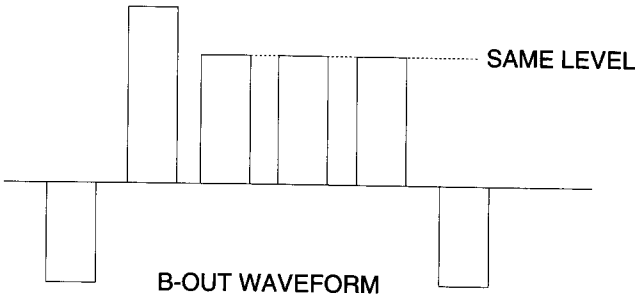
1. Input a Phillips pattern.
2. Enter into service mode and press 23.
3. Adjust data so that 0-IRE of grey scale and CUT-OFF 20-IRE are only slightly visible on screen.

SUB CONTRAST ADJUSTMENT

1. Input a video that contains a small 100% area on a Black Background.
2. Enter into service mode and press 01 to have PIC max followed by 21.
3. Connect oscilloscope to pin (1) of CN703 (R OUT) and adjust HWB Red data of TDA8366 1 to obtain 2.3Vp-p.

SUB COLOUR ADJUSTMENT

1. Input a PAL colour bar signal.
2. Connect an oscilloscope to pin (3) of CN703 (B OUT) on the C board.
3. Enter into service mode and press 22.
4. Adjust data so that the right sides of the waveform are set to the same level.



STEREO SEPARATION ADJUSTMENT

1. Input a 1KHz stereo signal to the L-ch and a 400Hz stereo signal to the R-ch.
2. Enter into service mode and select the "Test Menu" to be TDA6612.
3. Select the Stereo Xtalk Adjustment Menu, by using the Red (Next) and Green (Previous) buttons.
4. Monitor the Scart 1 L-channel output and adjust the data so that the R-channel sound is not detected in the L-channel.

I.F. COIL ADJUSTMENT

1. Apply a 38.9MHz signal at 100dBuV to the input of SWF101.
2. Receive a channel so that the I.C. is selected for negative modulation.
3. Measure the voltage at the AFT test point and adjust (T101) to obtain 2.4V +/- 0.2V.

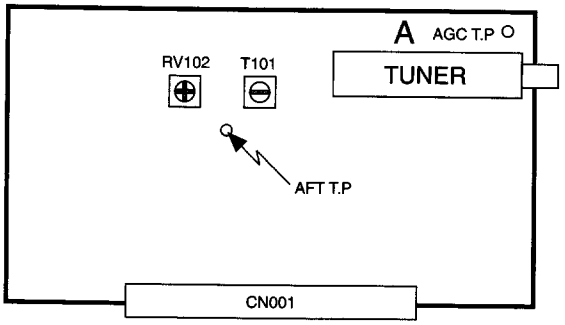
L, BAND 1 ADJUSTMENT (RV102) - L, STANDARD FOR FRENCH MODELS.

1. Apply a 33.95MHz signal at 100dBuV to the input of SWF101.
2. Receive a channel so that the I.C. is selected for positive modulation and system L band 1.
3. Measure the voltage at the AFT test point and adjust (RV102) to obtain 2.4V +/- 0.2V.

Note : Only adjust RV102 after T101 has been correctly adjusted.

AGC ADJUSTMENT

1. Receive an off- air signal.
2. Enter the service mode, ("Test" "Test") and 35.
3. Adjust the data so that there is no snow or cross - modulation visible on the screen.
4. Change the receiving off-air channel, and confirm the above status.



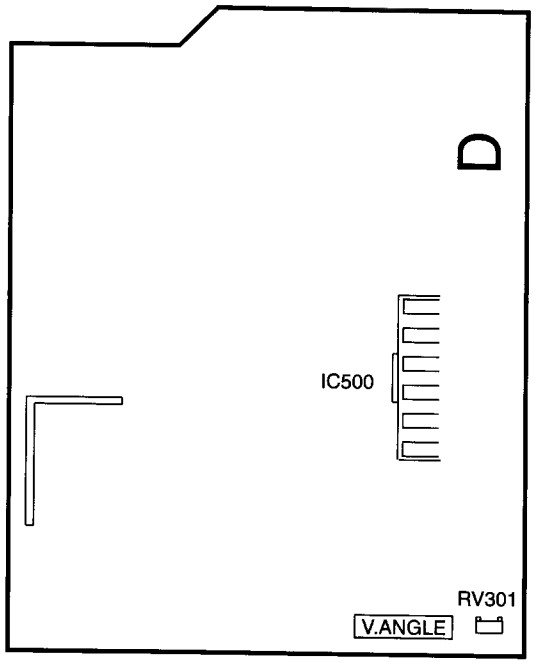
- A Board component side -

DEFLECTION SYSTEM ADJUSTMENT

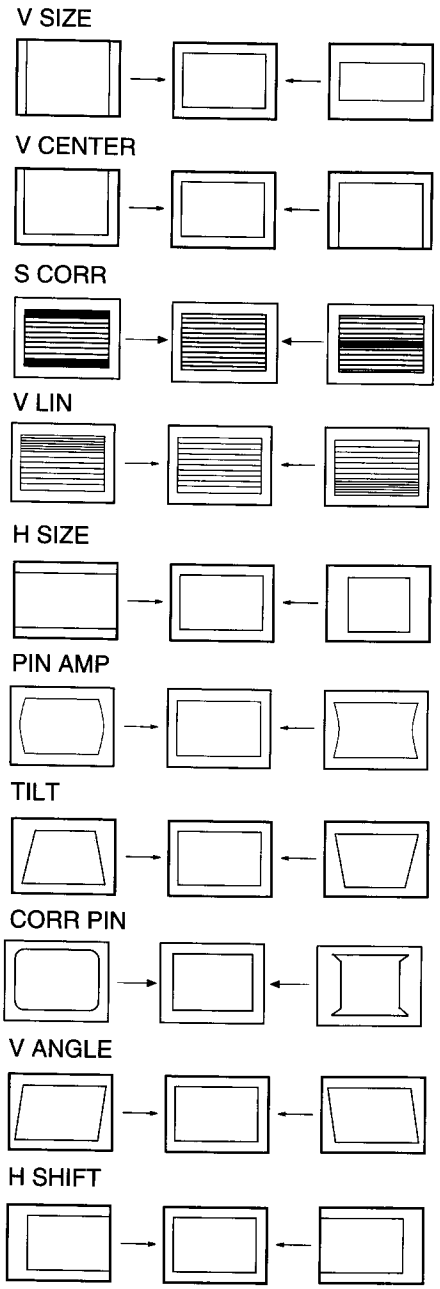
1. Enter into service mode.
2. Select and adjust each item in order to obtain the optimum image.

Item No	Adjustment item.	Data Amount
03	H SHIFT	ADJ.
04	H SIZE	ADJ.
05	PIN AMP	ADJ.
06	CORR PIN	ADJ.
07	TILT	ADJ.
08	V LINEAR	ADJ.
09	V SIZE	ADJ.
0A	S CORR	ADJ.
0B	V CENTER	ADJ.

Note : V ANGLE is adjusted by a Variable Resistor on the 'D' Board (RV301)



- D Board Component Side -



4-3. BE-3B SELF DIAGNOSTIC SOFTWARE

The identification of errors within the BE-3B chassis is triggered in 1 of 2 ways :- 1: Bus busy or 2: Device failiure to respond to IIC. In the event of one of these situations arrising the software will first try to release the bus if busy (Failiure to do so will report with continous flashing LED) and then communicate with each device in turn to establish if a device is faulty. If a device is found to be faulty the relevant device number will be displayed through the led (Series of flashes which must be counted) See Table 1., on fatal errors are reported with this method.

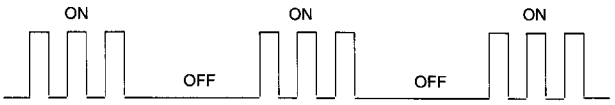
If a fatal error is found the set will simply stay in whichever state it was when the error occured, but if a non fatal error occurs the set will try to continue operation.

Table 1

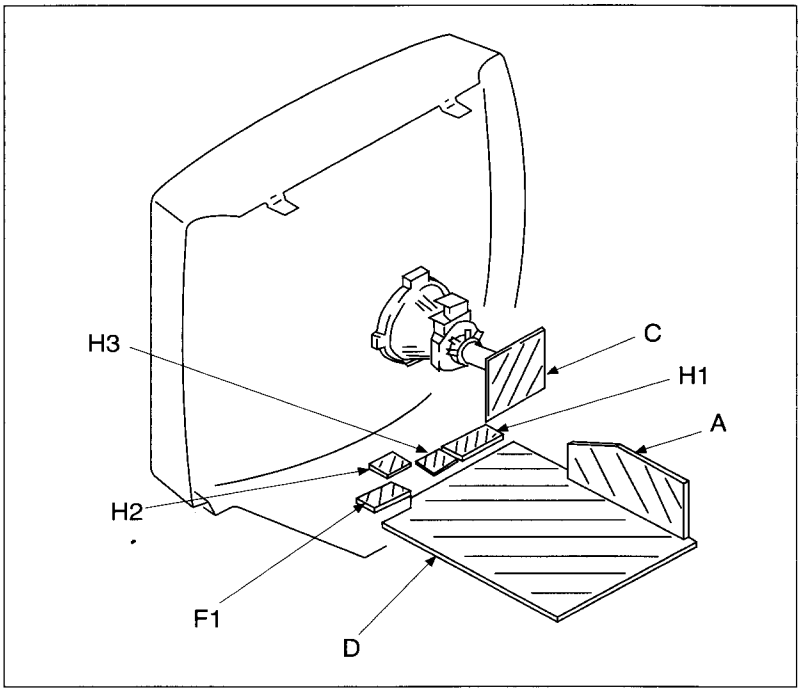
Device	LED Error Count	Fatal Error
NVM	2 .. 9	√
Teletext	10	
Jungle	11	√
Video_sw	12	
Tuner	13	√
Nicam	14	
Audio_cont	15	√

Flash Timing Example : e.g. error number 3.

Stby LED



5-2. CIRCUIT BOARDS LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note :

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytic and tantalums.
- All resistors are in ohms.
  k = 1000 , M = 1000K
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch : 5 mm
Rating electrical power ¼ W

- : nonflammable resistor.
- : internal component.
- : panel designation, or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- ⊥ : earth - ground.
- ⏚ : earth - chassis.
- # : no mounted.

Note : The components identified by shading and marked ⚠ are critical for safety. Replace only with the part number specified.

Note : Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

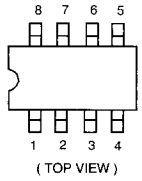
Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	:※	ADJUSTABLE RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

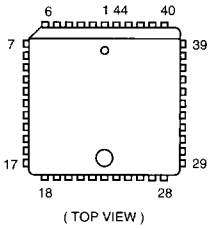
- Readings are taken with a colour-bar signal input.
- Readings are taken with 10M digital multimeter.
- Voltages are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- All voltages are in V.
- Circled numbers are waveform references.
- ——— : B+ bus.
- : signal path. (RF)

5-4. SEMICONDUCTORS

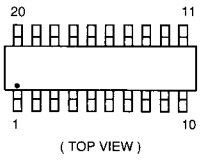
BA7046F



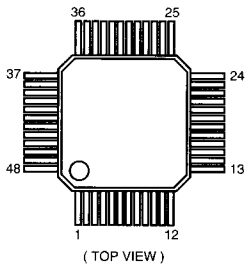
CF70200FN-R/C
CF70203FN-F



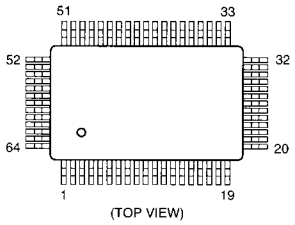
CF72416DW-R
TDA8395T



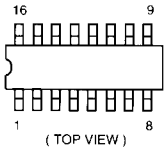
CXA1855Q



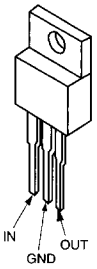
CXP85340A
SAA7283GP
TDA8366T



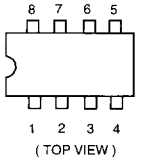
HD14053BF
MC14053BF



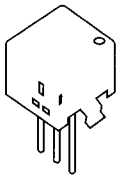
LM2940CT-5.0
LM2940CT-9.0
MCT7812CT
TA7812S
µPC2405HF



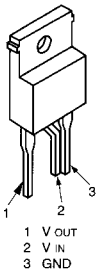
LM393P
TDA2822M
µPC393C



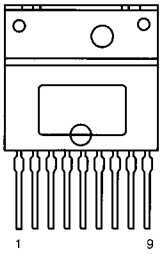
SBX1790-11
SBX1790-51



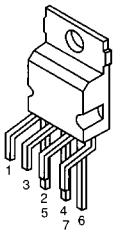
SE135N-LF12



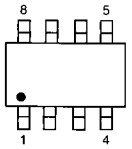
STR-S6708



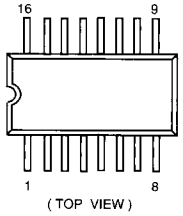
STV9379



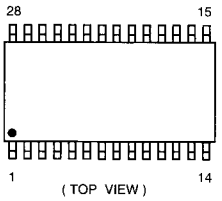
ST24E32M6



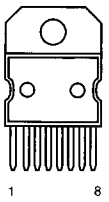
TDA4665T



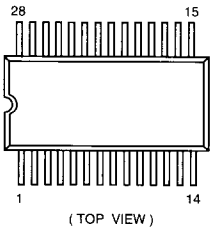
TDA6612-5X-GEG



TDA7264

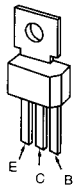


TDA9813T
TDA9814T/V2

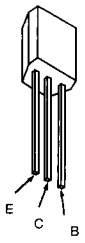


TL750L05CLPR

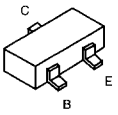
BF871



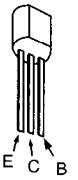
DTA144ES
DTC114ES
DTC143TS
DTC144ES



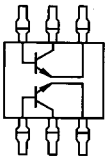
DTC114EK
DTC123EK
DTC144EK
2SA1037K
2SA1162-G
2SC2412K



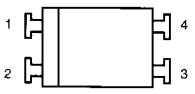
JA101
JC501
2SA1091-O
2SA733-K
2SC2389S-R
2SC2808S-R



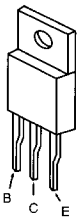
IMX1



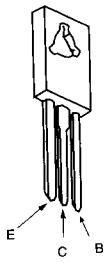
TLP721-GR



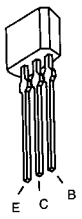
2SA1667
2SC3852A



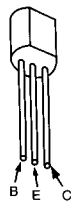
2SC2688-LK



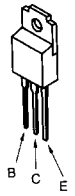
2SC2785-HFE



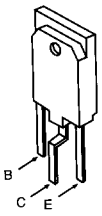
2SC3779C



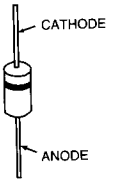
2SC4793



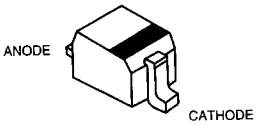
2SC4927-01



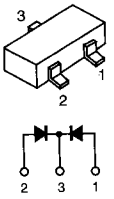
AU-01Z-V1	GP08D
EGP20G	RGP02-20E
EL1Z	RGP10GPKG23
EM1-V1	RGP15GPKG23
EU-1-V1	RU-3YX-V1
EU-1Z	RU4AM
EU-1Z-V1	RU4DS
FML-G12S	



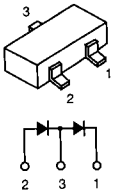
BAS216
DTZ33B
MA8330
1SS355
1SV214



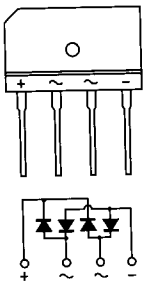
DAN202K
UMZ12N



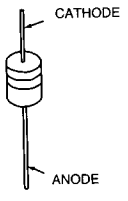
DA204K



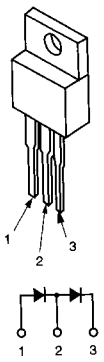
D4SB60L



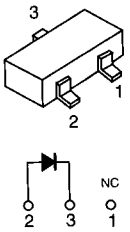
ERA85-009	MTZJ-9.1C
MTZJ-3.6A	MTZJ-39C
MTZJ-3.9B	RD3.9ESB2
MTZJ-4.7B	RD5.1ESB2
MTZJ-5.1B	RD5.6ESB2
MTZJ-5.6B	RD6.8ESB2
MTZJ-6.8C	RD7.5ESB2
MTZJ-7.5C	RD9.1ESB3
MTZJ-9.1	UZ-4.7BSC
MTZJ-9.1A	1SS133



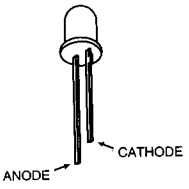
FMS-3FU



MA704WK

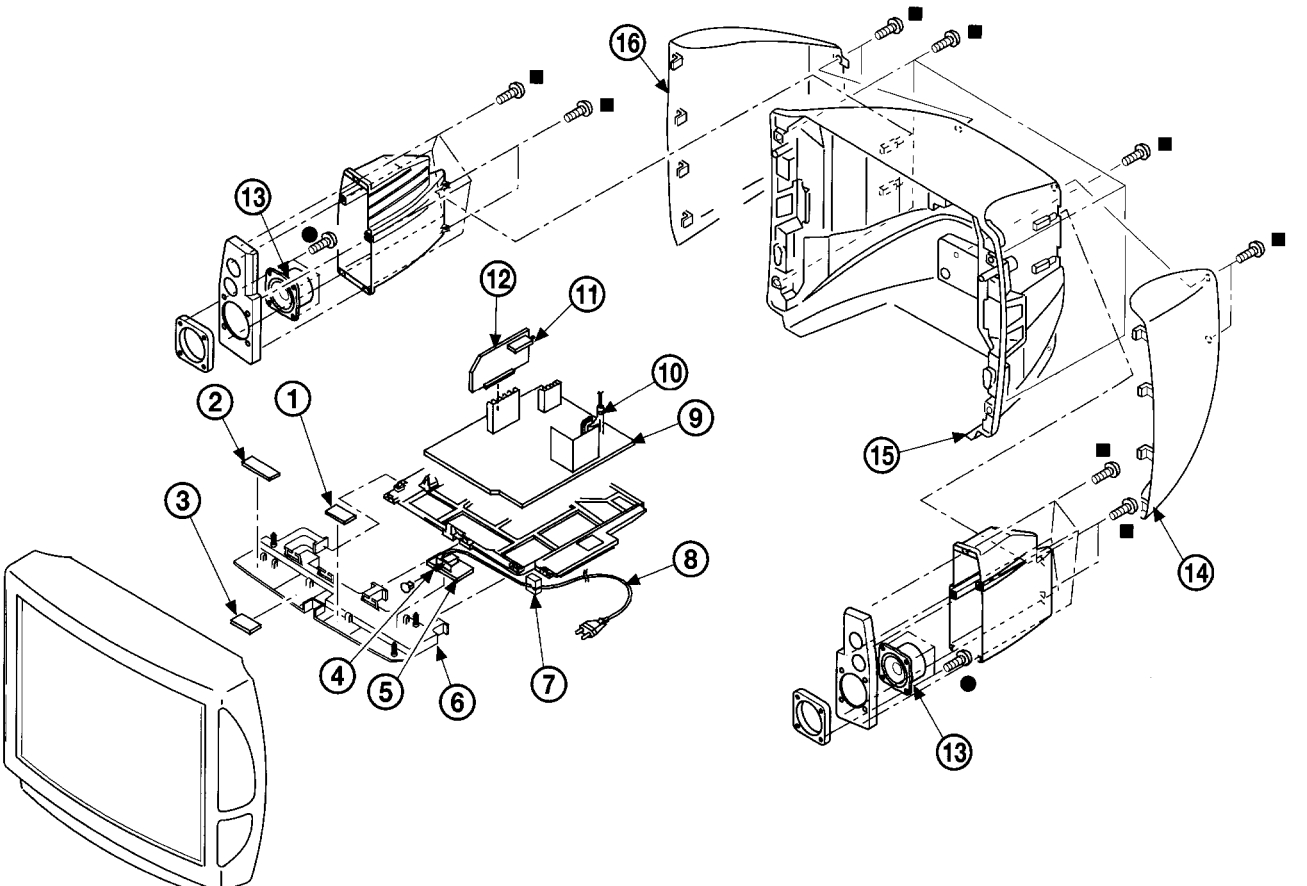


SLA-570KT3F

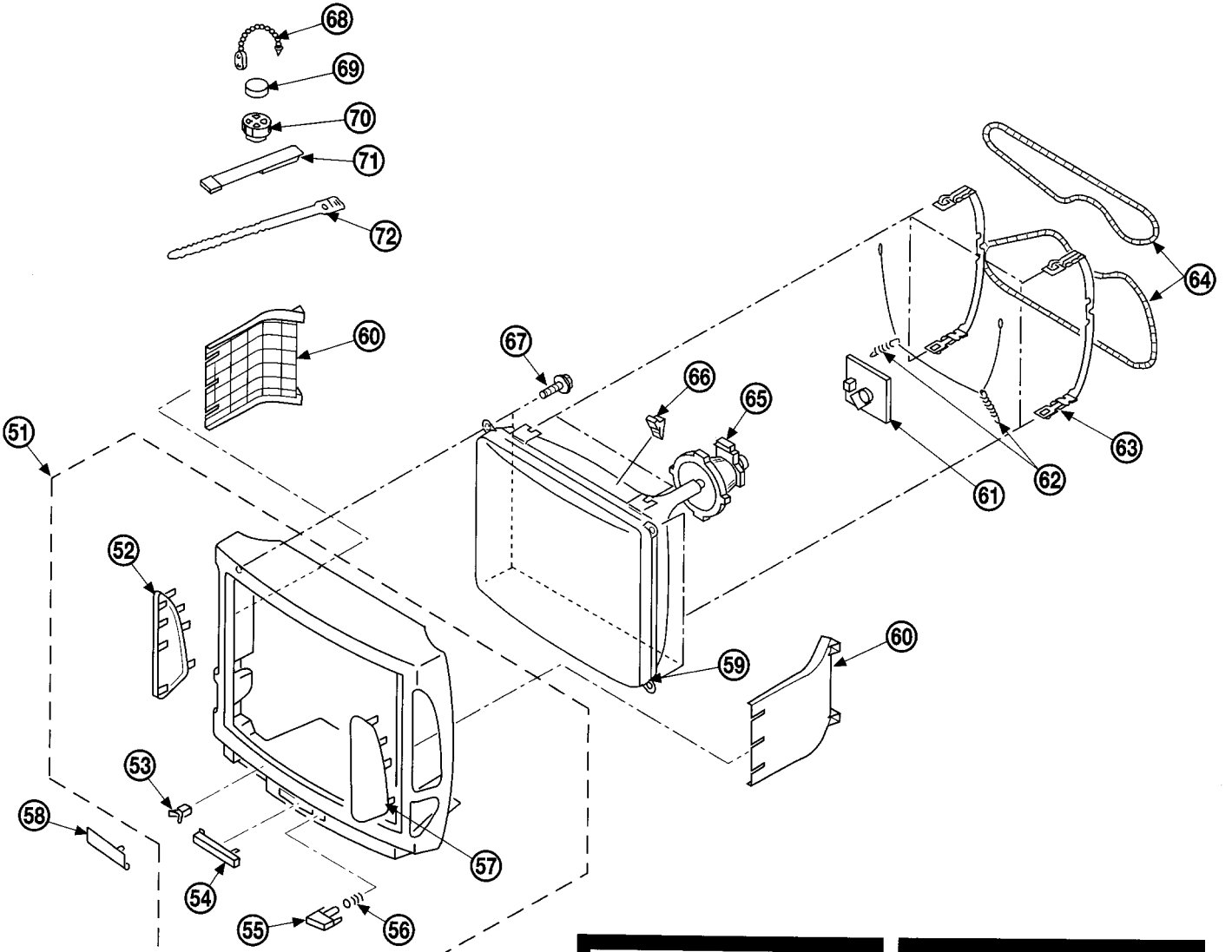


6-1. CHASSIS

■ : BVTP 4X16 7-685-663-79
● : BVTP 3X12 7-685-648-79



6-2. PICTURE TUBE



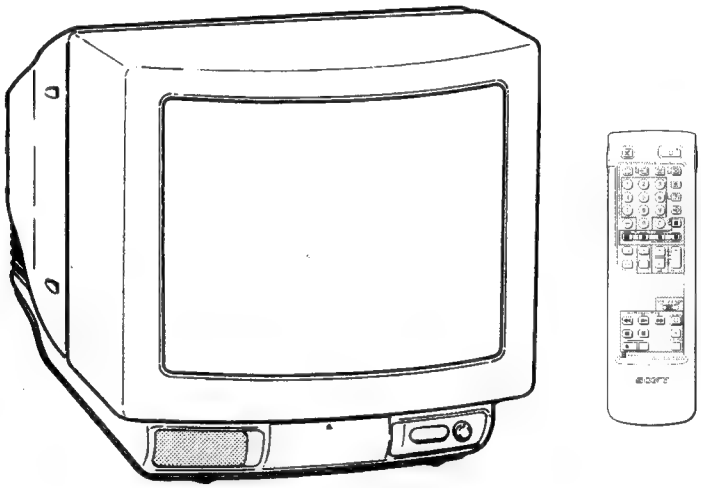
The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

SERVICE MANUAL

BE-3B CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.	MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-M2540D	RM-833	AEP	SCC-G77G-A	KV-M2541E	RM-833	Spanish	SCC-G82E-A
KV-M2541D	RM-833	AEP	SCC-G77F-A	KV-M2541L	RM-833	IRISH	SCC-G83D-A
KV-M2541A	RM-833	Italian	SCC-G81F-A	KV-M2541U	RM-833	UK	SCC-G87D-A
KV-M2540B	RM-833	French	SCC-G85F-A	KV-M2540K	RM-833	OIRT	SCC-G86E-A
KV-M2540E	RM-833	Spanish	SCC-G82F-A	KV-M2541K	RM-833	OIRT	SCC-G86D-A



MICROFILM

TRINITRON® COLOR TV

SONY®

ITEM MODEL	Television System	Channel Coverage	Color System
AEP	B/G/H, D/K	PAL B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UHF:21-69 D/K VHF:R01-R12 UHF:R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
Italian	B/G/H	ITALIA VHF:A-H2 (C) UHF: 21-69 PAL B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10	PAL NTSC4.43, NTSC3.58 (VIDEO IN)
French	B/G/H, L, I	L VHF:F02-F10 UHF:F21-F60 CABLE:B-Q B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UFH:21-69 I UHF: B21-B69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO-IN)
Spanish	B/G/H	PAL B/G VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UHF:21-69	PAL NTSC4.43, NTSC3.58 (VIDEO-IN)
Irish	I	VHF: A-J C10 (224MHZ) UHF: E21-E69 CABLE SO1-S41	PAL NTSC4.43, NTSC3.58 (VIDEO IN)
UK	I	UHF: B21-B69	PAL NTSC4.43, NTSC3.58 (VIDEO IN)
OIRT	B/G/H	B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 D/K VHF:RO1-R12 UHF:R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)

MODEL	AEP Text	AEP Non Text	Italian	French Non Text	Spanish Text	Spanish Non Text	Irish	UK	OIRT TEXT	OIRT NON TEXT
Power Consumption	85W	85W	85W	85W	85W	85W	109W	109W	85W	85W

SPECIFICATIONS

Picture Tube — Hi-Black Trinitron
Approx. 63 cm (25 inches)
(Approx. 60 cm picture measured diagonally)
110° -deflection

Input/Output Terminals

[REAR]

- 1 21-pin Euro connector (CENELEC standard)
  - inputs for audio and video signals
  - inputs for RGB
  - outputs of TV video and audio signals

[FRONT]

- 2 Video input - phono jack
- 2 Audio inputs - phono jacks
- 2 S video input 4-pin DIN
- Ω Headphone jacks : stereo minijack

Sound output	10W (Music)
Power requirements	220 - 240V
Dimensions	Approx. 500x580x520 mm
Weight	Approx. 43kg
Supplied accessories	RM-833 Remote Commander (1) IEC designation R6 battery (1)
Other features	FASTEXT, TOPTEXT.

[RM-833]

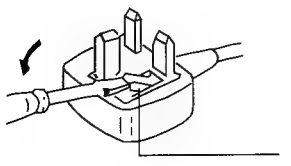
Remote control system	infrared control
Power requirements	1.5V dc 1 battery IEC designation R6 (size AA)
Dimensions	Approx. 65x225x21 mm (w/h/d)
Weight	Approx. 157g (Not including batteries)

Design and specifications are subject to change without notice.

Model name / Item	KV-M2541A	KV-M2540B	KV-M2540D	KV-M2541D	KV-M2540E	KV-M2541E	KV-M2540K	KV-M2541K	KV-M2541L	KV-M2541U
RGB Priority	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Scart 1	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
Front in (3)	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
AKB in 16:9 mode	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
Norm B/G	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF
Norm I	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	ON
Norm D/K	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF
Norm AUS	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Norm L	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Teletext	ON	OFF	OFF	ON	OFF	ON	OFF	ON	ON	ON
Language Preset	Italian	French	Deutch	Deutch	Spanish	Spanish	OIRT	OIRT	English	English

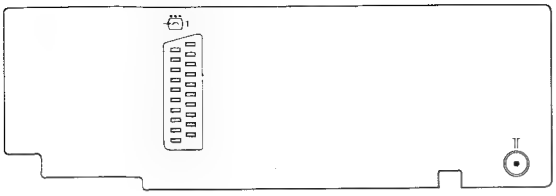
WARNING (KV-M2541L / KV-M2541U only)

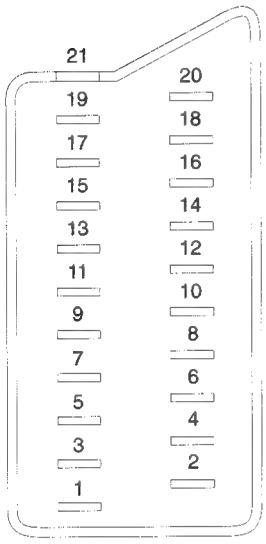
The flexible mains lead is supplied connected to a **B.S. 1363** fused plug having a fuse of **5 AMP** capacity. Should the fuse need to be replaced, use a **5 AMP FUSE** approved by **ASTA** to **BS 1362**, ie one that carries the ASTA mark.
IF THE PLUG SUPPLIED WITH THIS APPLIANCE IS NOT SUITABLE FOR YOUR SOCKET OUTLETS IN YOUR HOME.
IT SHOULD BE CUT OFF AND AN APPROPRIATE PLUG FITTED.
THE PLUG SEVERED FROM THE MAINS LEAD MUST BE DESTROYED AS A PLUG WITH BARED WIRES IS DANGEROUS IF ENGAGED IN A LIVE SOCKET OUTLET.
When an alternative type of plug is used it should be fitted with a **5 AMP FUSE**, otherwise the circuit should be protected by a **5 AMP FUSE** at the distribution board.



How to replace the fuse.
Open the fuse compartment with the screwdriver blade and replace the fuse.

21 pin connector (📷-1)





Pin No.	1	2	4	Signal	Signal level
1	○	○	○	Audio output B (right)	Standard level : 0.5V rms Output impedance : Less than 1kohm*
2	○	○	○	Audio input B (right)	Standard level : 0.5V rms Output impedance : More than 10kohm*
3	○	○	○	Audio output A (left)	Standard level : 0.5V rms Output impedance : Less than 1kohm*
4	○	○	○	Ground (audio)	
5	○	○	○	Ground (blue)	
6	○	○	○	Audio input A (left)	Standard level : 0.5V rms Output impedance : More than 10kohm*
7	○	●	●	Blue input	0.7 ± 3dB, 75 ohms, positive
8	○	○	○	Function select (AV control)	High state (9.5 - 12V) : Part mode Low state (0 - 2V) : TV mode Input impedance : More than 10k ohms Input capacitance : Less than 2nF
9	○	○	○	Ground (green)	
10	○	○	○	Open	
11	○	●	●	Green	Green signal : 0.7 ± 3dB, 75 ohms, positive
12	○	○	○	Open	
13	○	○	○	Ground (red)	
14	○	○	○	Ground(blanking)	
15	○	–	–	Red input	0.7 ± 3dB, 75 ohms, positive
	–	○	○	(S signal) croma input	0.3 ± 3dB, 75 ohms, positive
16	○	●	●	Blanking input (Ys signal)	High state (1 - 3V) Low state (0 - 0.4V) Input impedance : 75ohms
17	○	○	○	Ground(video output)	
18	○	○	○	Ground(video input)	
19	○	○	○	Video output	1V ± 3dB,75ohms,positive sync: 0.3V(-3+10dB)
20	○	–	–	Video input	1V ± 3dB,75ohms,positive sync: 0.3V(-3+10dB)
	–	○	○	Video input Y (S signal)	1V ± 3dB,75ohms,positive sync: 0.3V(-3+10dB)
21	○	○	○	Common ground (plug, shield)	

○ Connected ● Not Connected (open) * at 20Hz - 20kHz

Pin No	Signal	Signal level
1	Ground	
2	Ground	
3	Y (S signal) input	1V ± 3dB 75 ohm , positive Sync. 0.3V -3/+10 dB
4	C (S signal) input	0.3V ± 3dB 75 ohm , positive Sync.

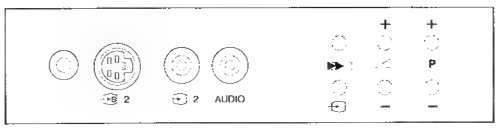


TABLE OF CONTENTS

CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVAL OF THE ANODE CAP.

WARNING !!

AN ISOLATING TRANSFORMER SHOULD BE USED DURING ANY SERVICE WORK TO AVOID POSSIBLE SHOCK HAZARD, DUE TO A LIVE CHASSIS. THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARKED ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLIMENTS PUBLISHED BY SONY.

ATTENTION

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION !!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENTION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÈ LORS DE TOUT DÈPANNAGE. LE CHÁSSIS DE CE RÈCEPTEUR EST DIRECTEMENT RACCORDÈ Á L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS Á LA SÈCURITÈ !!

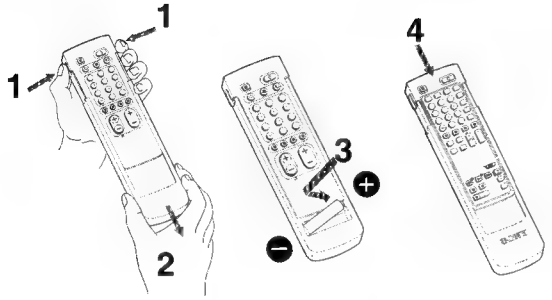
LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET PAR UNE MARQUE ⚠ SUR LES SCHÈMAS DE PRINCIPE, LES VUES EXPLOSÈES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÈCURITÈ DU FONCTIONNEMENT, NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÈRO DE PIÈCE EST INDIQUÈ DANS LE PRÈSENT MANUEL OU DANS DES SUPPLÈMENTS PUBLIÈS PAR SONY.

SECTION 1 GENERAL

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

Getting Started

Inserting the Battery Into the Remote Commander



Remove the cover.

Check the correct polarity.

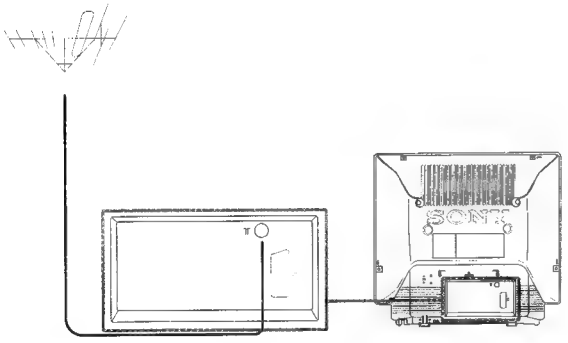
Refit the outside cover making sure that the Full Function side is visible.

About Battery Life

Under normal operation, a battery will last up to half a year.

Connecting the Aerial

Connect aerial to the ⊺ socket at the rear of the TV. (cable not supplied)



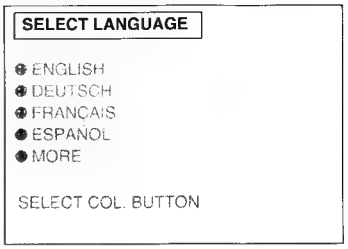
Choosing a Language

(See inside of front cover and back cover)

1 Depress ⏻ A on the TV.
The TV turns on. If the standby indicator B on the TV is lit, press ⏻ 3 or any number button 4 on the Remote Commander.

2 Press MENU 7 on the Remote Commander.
The SELECT LANGUAGE screen appears.

3 Press one of the colour buttons 17 on the Remote Commander to select a language (Press the white button 17 to display other language alternatives).
The SELECT LANGUAGE screen clears and all subsequent menus appear in the chosen language.



Note: From the second time when you turn on the TV, the MENU screen appears instead of the SELECT LANGUAGE screen. Press the yellow button 17 then press the white button 17 to redisplay the SELECT LANGUAGE screen.

Tuning in to Channels

You can tune in up to 60 channels to programme positions either automatically or manually.

auto tuning:	A single button press allows all receivable channels to be tuned. Use if you are unfamiliar with the channel numbers of stations.
manual tuning:	Use if you are familiar with the channel numbers of stations. (Channel numbers from the main UK transmitters are shown on page 13)

Choose the more appropriate way for you.

Tuning in to Channels Automatically

There are two possibilities for auto tuning;

A. On the TV: hold down ▶▶❙ E on the front of the TV for 2 seconds
(All receivable channels are tuned in the order noted below).

or

B. On the Remote Commander: as follows

1 Press MENU 7.

2 Press the yellow button 17.

3 Hold down the red button 17 for 2 seconds,

Note: Press the green button 17 to cancel.

Channels are automatically stored as follows:

	KV-M2541U	KV-M2541L
Programme1	BBC1	RTE1
Programme2	BBC2	RTE2
Programme3	ITV	BBC1
Programme4	CH4 or S4C	BBC2
Programme5	—	ITV
Programme6	—	CH4 or S4C

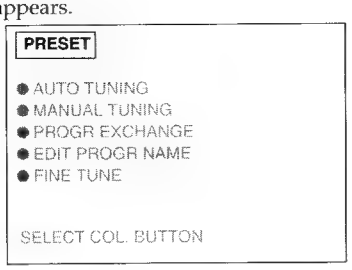
Note: Programme names are automatically taken from TELETEXT if available. If not, "- - - - -" is placed in the name.

- If you connect a VCR via the aerial cable, set the VCR to its test signal or play mode before auto-tuning.
- You may have to exchange the programme positions, if there are duplicated signals from local transmitters .

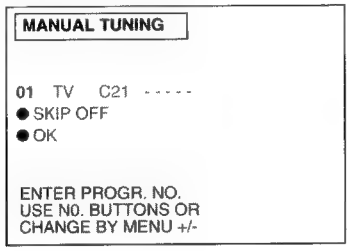
Tuning in to Channels Manually

1 **Press MENU [7].**
The MENU screen appears.

2 **Press the yellow button [17] to select PRESET.**
The PRESET screen appears.



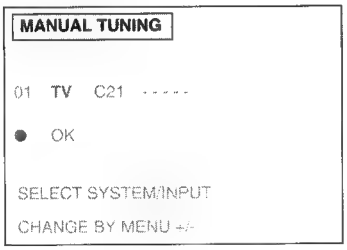
3 **Press the green button [17] to select MANUAL TUNING.**
The MANUAL TUNING screen appears.

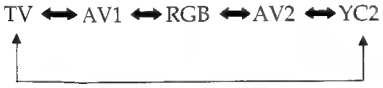


4 **Press the number buttons [4] or MENU+/– [9] to select a programme position.**
If you use the number buttons [4], enter a double-digit number. (e.g. for programme number 4, first press 0, then 4)

5 **Press the green button [17].**

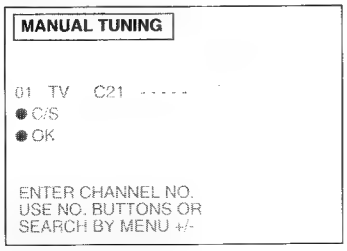
Note: Use MENU +/– [9] to select "TV". You can alternatively select input sources which may be assigned to programme positions. The display changes as follows:





6 **Press the green button [17].**

Note: If a video input source is selected in step 5, this is now stored. Refer to step 4 to tune other programme positions.



7 **(KV-M2541L only)**
Press the red button [17] to select C (regular channel) or S (cable channel).

8 **Press the number buttons [4] or MENU+/– [9] to select the channel number.**
If you use the number buttons [4], enter a double-digit number. (e.g. for channel 23, first press 2, then 3)

Note: Programme names are automatically taken from TELETEXT if available. If not, "- - - - -" is placed in the name. Or if you select AV1, RGB, AV2 or YC2 as an input source, AV1, RGB, ... is placed.

9 **Press the green button [17] to store.**

Note: If you want to preset other channels, repeat steps 4 to 9.

10 **Press MENU [7] twice to return to the normal screen.**

Note: You can skip unused programme positions when selecting programmes with the PROGR +/– buttons [18]. Press the red button [17] to skip in step 4. However, the skipped programmes may still be called up when you use the number buttons.

Basic TV Operations

Turning the TV on and off

Turning on
Depress ⏻ [A] on the TV.

Turning off temporarily
Press ⏻ [10] on the Remote Commander.
The TV enters standby mode and the standby indicator [B] on the front of the TV lights up.

Turning on again
Press ▭ [3], PROGR+/– [18], or one of the number buttons [4] on the Remote Commander.

Turning off completely
Depress ⏻ [A] on the TV.
Note: It is recommended to use ⏻ [A] to turn off the TV. This could help you save energy.

Selecting TV Programmes

Press PROGR+/– [18] or press number buttons [4].

To select a double-digit number
Press -/-- [5], then the number buttons [4].

Adjusting the Volume

Press 🔊+/– [19].

Muting the Sound

Press 🔇 [1].
To resume normal sound, press 🔇 [1] again.

Displaying the On-screen Indications

Press ⓘ [14] once to display the on-screen indications.
Press again to make the indications disappear.

Operating the TV Using the Buttons on the TV

With the buttons on the TV, you can adjust or select the functions as follows:

Press 🔊+/– [D] to adjust the volume.
Press P+/– [C] to select programme numbers or to turn the TV on from the standby mode.
Press ⏻ [F] to select the input source.
Press ⏭ [E] to preset channels automatically.

Advanced TV Operations

Operating the Menu System

You can adjust picture, preset channels to programme positions and utilise other convenient features by using the following menu system.

Press;		to;
1	MENU 7	enter the MENU screen
2	a colour button 17	select an item you want to change (The selected item is marked by a triangle.)
3	MENU+/– 9	change (or adjust) the contents of the item
4	MENU 7	return to the MENU screen
5	MENU 7 again	return to the normal screen
Press MENU 7 once or twice whenever you want to return to the normal screen.		

Note: When selecting menus, the picture becomes darker. If, however, an item in the PICTURE ADJUSTMENT menu is selected, normal level of TV picture is restored to allow the best adjustment.

Adjusting the Picture

Although picture is adjusted at the factory you can adjust it to suit your own taste.

1 Press MENU 7.
The MENU screen appears.

2 Press the red button 17 to select PICTURE.

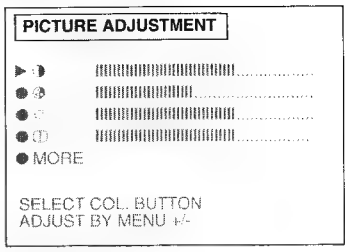
3 Press the respective colour button 17 to select an item.

4 Press MENU +/– 9 to adjust.

5 Press MENU 7 twice or wait until the menu displays disappear automatically to return to the normal screen.

PICTURE ADJUSTMENT

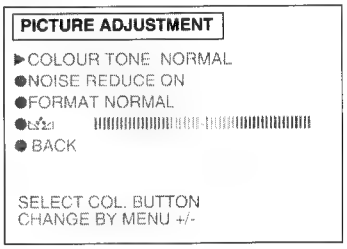
(First Page)



Press colour button	Effect
Red: For Picture ◑	Less —I— More
Green: For Colour ◕	Less —I— More
Yellow: For Brightness ○	Darker —I— Brighter
Blue: For Sharpness ◫	Softer —I— Sharper
White:	Next page of PICTURE ADJUSTMENT

PICTURE ADJUSTMENT

(Second Page)



Press colour button	Effect
Red: For Colour Tone	Normal -> Warm (reddish colour tone) -> Cool (blueish colour tone)
Green: For Noise Reduce	ON: Reduces picture noise (in case of low signal level) OFF: Normal setting
Yellow: For Format	Normal: Normal setting 16:9 Wide screen effect
Blue: For Hue control (only for NTSC video signals)	Reddish —I— Greenish
White:	Back to first page of PICTURE ADJUSTMENT

Note: Press ➔• 8 on the Remote Commander to reset to the factory preset levels for picture.

Using Special Features

With your TV you can utilise special features such as Parental Lock or Sleep Timer .

1 **Press MENU [7].**
The MENU screen appears.

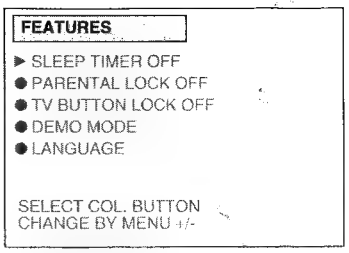
2 **Press the green button [17] to select FEATURES.**

3 **Press the respective colour button [17] to select an item.**

4 **Press MENU +/– [9] to change.**

5 **Press MENU [7] twice or wait until the menu displays disappear automatically to return to the normal screen.**

FEATURES



Press colour button	Effect
Red: For Sleep Timer (Automatic switch off function)	OFF -> 0:30 -> 1:00 -> 1:30 -> 2:00 (hours) After the selected time the TV set switches itself automatically into standby mode.
Green: For Parental Lock (For preventing children from watching programmes which you consider unsuitable)	OFF: Normal setting ON: The TV-channel you are watching is now blocked. In this way you can prevent undesirable broadcasts from appearing on the screen.
Yellow For TV Button Lock	OFF: Normal setting ON: The buttons on the TV do not function anymore. (The Remote Commander still operates)
Blue: For Demo Mode	ON: A sequence of menu pictures is displayed. Press any button on the Remote Commander to stop the function.
White: For Language	The SELECT LANGUAGE screen appears.

Advanced Presetting Functions

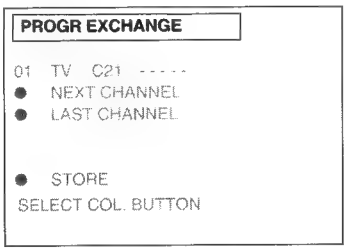
Exchanging Programme Positions

You can exchange the programme positions to a preferred order (example: exchange programme 09 (channel C21) with programme 15 (channel C24)).

1 **Press MENU 7.**
The MENU screen appears.

2 **Press the yellow button 17.**
The PRESET screen appears.

3 **Press the yellow button 17.**
The PROGR EXCHANGE screen appears.



4 **Press the white button 17 repeatedly until the desired programme number (09) appears.**

5 **Press the red or the green button 17 repeatedly until the desired channel number (C24) appears.**

6 **Press the white button 17 to store.**
Now the exchange has been completed. Channel C24 is tuned in to programme 09 and channel C21 is tuned in to programme 15.

7 **Press MENU 7 twice to return to the normal screen.**

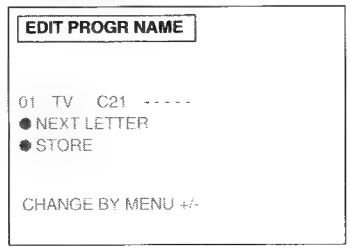
Editing Programme Names

You can edit the programme names up to five letters.

1 **Press MENU 7.**
The MENU screen appears.

2 **Press the yellow button 17.**
The PRESET screen appears.

3 **Press the blue button 17.**
The EDIT PROGR NAME screen appears.
The first character flashes.



4 **Press MENU+/– 9 to edit the first letter.**
The first letter changes as follows;

A ↔ B ↔ . . . ↔ Z ↔ 0 ↔ 1 ↔ . . . ↔ 9 ↔ "–" (space)

5 **Press the red button 17 to move to the next letter.**

6 **Repeat steps 4 to 5, until the fifth letter is chosen.**

7 **Press the green button 17.**
The programme name is stored, and the normal screen appears. To edit another programme name, repeat steps 1 to 7.

Fine Tuning

You can adjust the receiving condition by the FINE TUNE function.

1 **Press MENU 7.**
The MENU screen appears.

2 **Press the yellow button 17.**
The PRESET screen appears.

3 **Press the white button 17 again.**
The FINE TUNE screen appears.

4 **Press MENU+/– 9 to adjust the receiving condition.**

5 **Press the red button 17 to store the adjustment, or press the green button 17 not to store.**
Then the normal screen appears. If you have pressed the green button, the fine tuned condition is cancelled once you choose another programme.

Tuning in to a Channel Temporarily

You can tune in to a channel temporarily, even when it has not been preset.

1 **Press C 16 on the Remote Commander.**
The indicaton "C" appears on the screen.

Note: (KV-M2541L only)
For cable channels, press C 16 twice. The indication "S" appears.

2 **Enter a double-digit channel number using the number buttons (e.g. for channel 23, first press 2, then 3).**
The channel appears.
However, the channel is not stored.

Teletext Operation

TV stations broadcast teletext programmes via the TV channels. For basic operation of teletext, use the simple side of the Remote Commander. For the advanced features of teletext, use the buttons indicated in green on the full function side of the Remote Commander.

Basic Teletext Operation

Switching Teletext on and off

1 **Select the channel which carries the teletext service you wish to view.**

2 **Press ☰ 11 to display Teletext.**
If no teletext signal is broadcast, the indication P100 is displayed on a black screen.

3 **Input three digits for the page number using the number buttons 4.**
The numbers are displayed on the screen and the requested page appears in a few seconds.
Note: If you make a mistake, type in any three digits, then re-enter the correct page number.

4 **Press ▢ 3 to return to the TV mode.**

Note: To change the teletext channels. First press ▢ 3 to return to the TV mode, then repeat steps 1 to 3.
Note: If the signal of a TV channel is weak, teletext errors may occur.

Advanced Teletext Operation

Using Fastext

With Fastext you can access pages with one button press. When a Fastext page is broadcast, a colour-coded menu will appear at the bottom of the screen. The colours of this menu correspond to the red, green, yellow and blue buttons 6 on the Remote Commander.
Press the corresponding colour button 6 on the Remote Commander which corresponds to the colour-coded menu. The page will be displayed in a few seconds.

Requesting the Index page

Press ☰ 17. The Index page appears.

Accessing the next or preceding page

Press ☰▲ (PAGE +) or ☰▼ (PAGE –) 18. The next or the preceding page appears on the screen.

Superimposing the teletext display on the TV picture

Press ☰ 11 once if you are in text mode or press ☰ 11 twice if in TV mode.
To return to the normal teletext display press ☰ 11 again.

Preventing a teletext page from being updated or changed

Press ⊕ (HOLD) 2. The HOLD symbol (⊕) appears on the screen and the selected subpage is held until you press ☰ 11 to cancel.

Enlarging the teletext display

Press ⊕ 13 once to enlarge the upper half. Press twice to enlarge the lower half. Press again to restore the normal display.

Revealing concealed information (e.g. answers to a quiz)

Press ? (REVEAL) 14. The information is revealed. Press ? 14 again to conceal the information.

Watching TV while waiting for a requested page to be displayed

1 **Request a new teletext page.**

2 **Press ☒(TEXT CL) 12.**
The TV programme is displayed and the symbol ☰ is displayed at the top of the page.
Note: When the requested page is available the page number is displayed at the top of the screen.

3 **Press ☰ 11 to view the page.**

Note: To cancel the request
Display the teletext page, then press ☰ 11. The request is now cancelled. Press ▢ 3 to resume TV mode.

Using the Favourite Page system

You can store up to four of your favourite teletext pages per programme with the help of the Favourite page system. In this way you have quick access to the pages you watch frequently.

Storing the Favourite Pages

1 **Select the page you would like to store using the number buttons 4.**

2 **Press ⇳ 15 twice.**
The colour prompts at the bottom of the screen flash.

3 **Press any of the colour buttons 6 on the Remote Commander to store the selected page.**
The page is now stored on this button.

Repeat steps 1 to 3 for the other 3 pages available.

Displaying the Favourite pages

1 **Press ⇳ 15.**

2 **Press the colour button 6 corresponding to the colour prompt onto which the desired page is stored.**
The page is requested. (It may take a few seconds to be received).

Note: Step 1 must be taken before every favourite page selection, otherwise the normal Fastext facility operates.

Using the Time Function in the TV mode

Press ◷ 12 to request the time. Press again to cancel the request.
Note: This function is available only when teletext is broadcast.

Connecting Other Equipment

You can connect optional audio/video equipment to this TV such as VCRs, video disc players, cameras or stereo systems.

Connector	Acceptable input signal	Available output signal
1 L (AV1/RGB)	Audio/video and RGB signal	Audio/video signal from TV Tuner
2/2 G H (AV2)	Audio/video signal	No outputs
2/S2 G I (YC2)	Audio/S video signal	No outputs

To watch a video input picture, press 2 until the desired video input appears.
To return to the normal TV picture, press 2 repeatedly or press 3.
Note: If you have a decoder, connect it to 1 L.

Connecting a VCR Using the TV Aerial Terminal

Connect the aerial output of the VCR to the aerial terminal K of the TV. It is recommended to tune in the VCR signal to programme number "0". For details, see "Tuning in to Channels Manually" on page 6.

Note: S video input (Y/C input) I
Video signals may be separated into Y (luminance or brightness) and C (chrominance) signals.
Separating the Y and C signals prevents them from interfering with each other and therefore improves the picture quality (especially luminance). This TV is equipped with 1 video input terminal through which these signals can be input directly.

Remote Control of Other Sony Equipment

You can use the TV Remote Commander to control most Sony remote-controlled video equipment such as: Beta, 8mm or VHS VCRs or video disc players.

Tuning the Remote Commander to the equipment

1 Set the VTR 1/2/3 MDP selector 20 according to the equipment you want to control:

VTR 1: Beta VCR
VTR 2: 8mm VCR
VTR 3: VHS VCR
MDP: Video Disc Player

2 Use the buttons 21 to operate the additional equipment.

Note: If your video equipment is furnished with a COMMAND MODE selector: set this selector to the same position as the VTR 1/2/3 MDP selector on the TV Remote Commander.
Note: If the equipment does not have a certain function, the corresponding button on the Remote Commander will not operate.
Note: When you use the ● (record) button, make sure to press this button and the one to the right of it simultaneously.

Using Headphones

You can utilise headphones. Connect them to the headphone jack J, then the sound from the speaker goes off.

For your information

Troubleshooting

Here are some simple solutions to problems which may affect the picture and sound.

No picture (screen is dark), no sound

- Plug the TV in.
- Press ⏻ A on the TV. (If the standby indicator B is lit, press 3 or any number button 4 on the Remote Commander.)
- Check if the selected video source is on.
- Turn the TV off for three or four seconds and then turn it on again using ⏻ A.

Poor or no picture (screen is dark), but good sound

- Press MENU 7 to enter the MENU screen, and press the red button 17, then adjust ◑ and ☼.

Good picture but no sound

- Press + 19.
- If 🔇 is displayed on the screen, press 🔇 1.

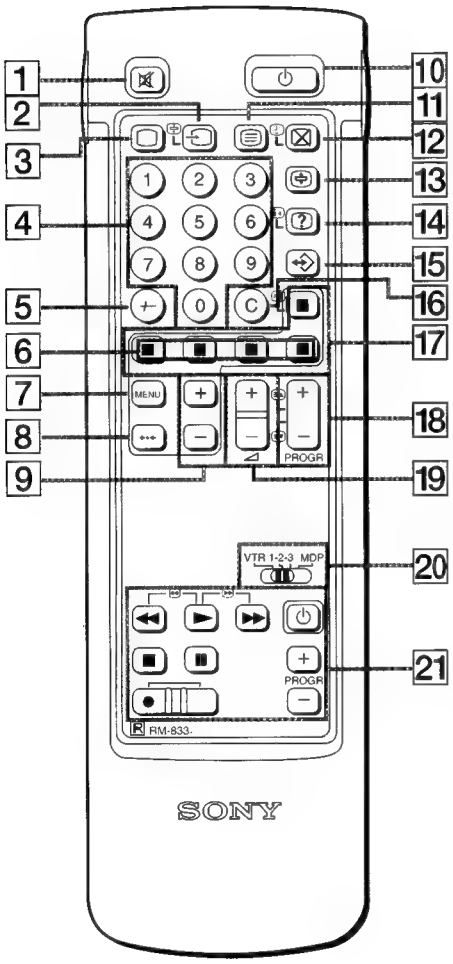
No colour for colour programmes

- Press MENU 7 to enter the MENU screen, and press the red button 17, then adjust ◕.

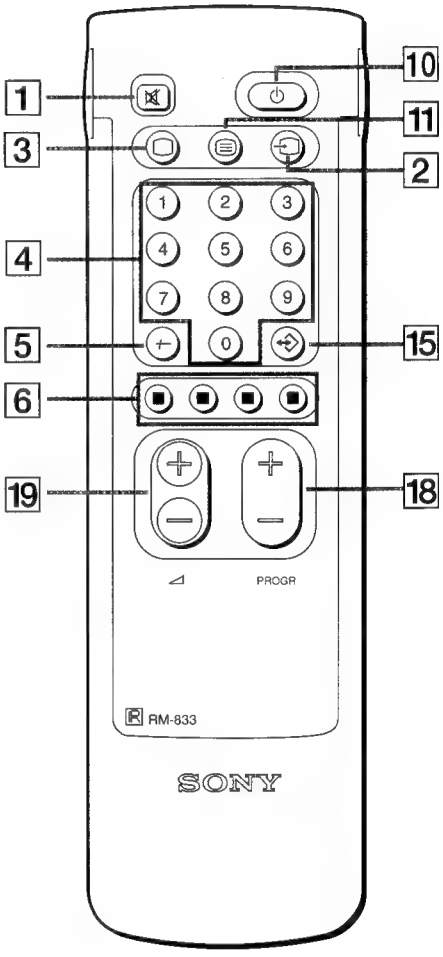
Remote Commander does not function

- Replace the battery.

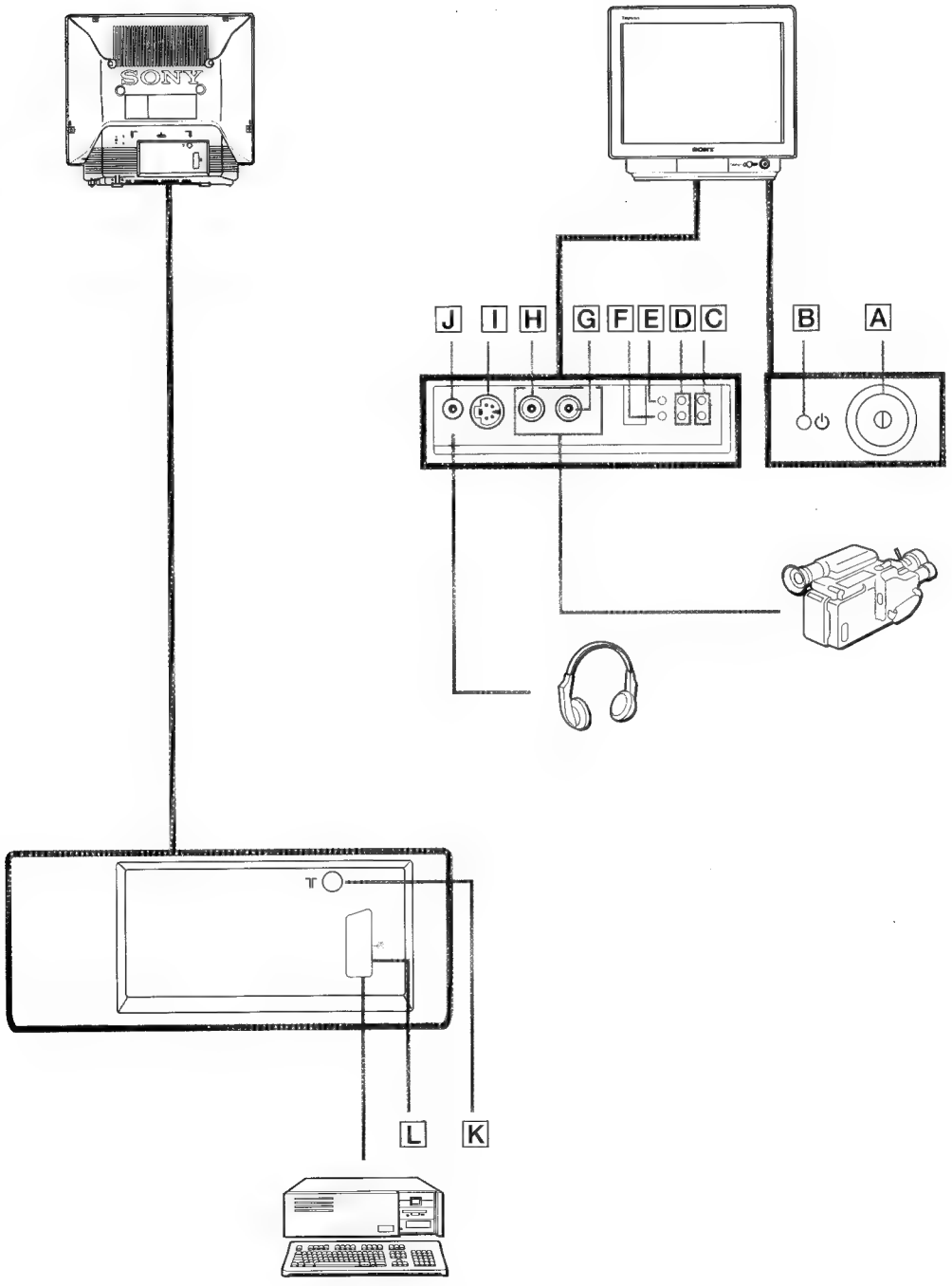
If you continue to have problems, have your TV serviced by qualified personnel. Never open the casing yourself.



Full-Function Side

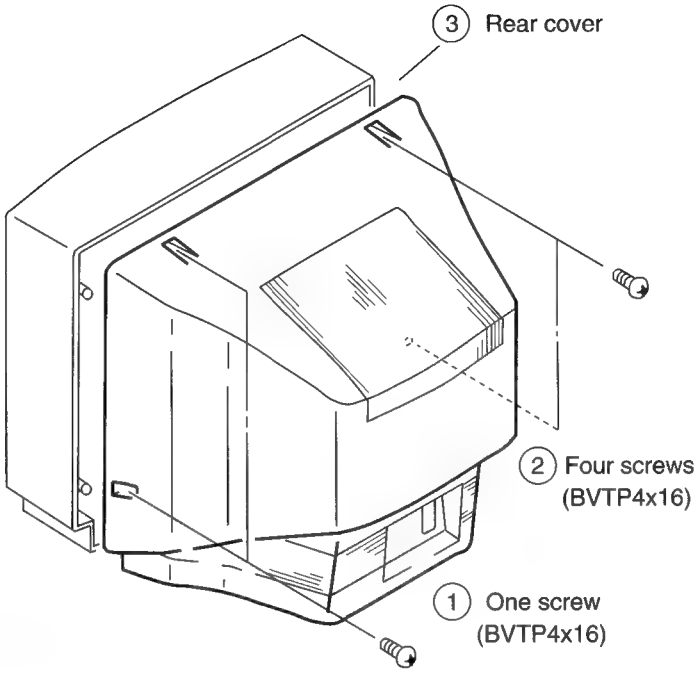


Simple Side

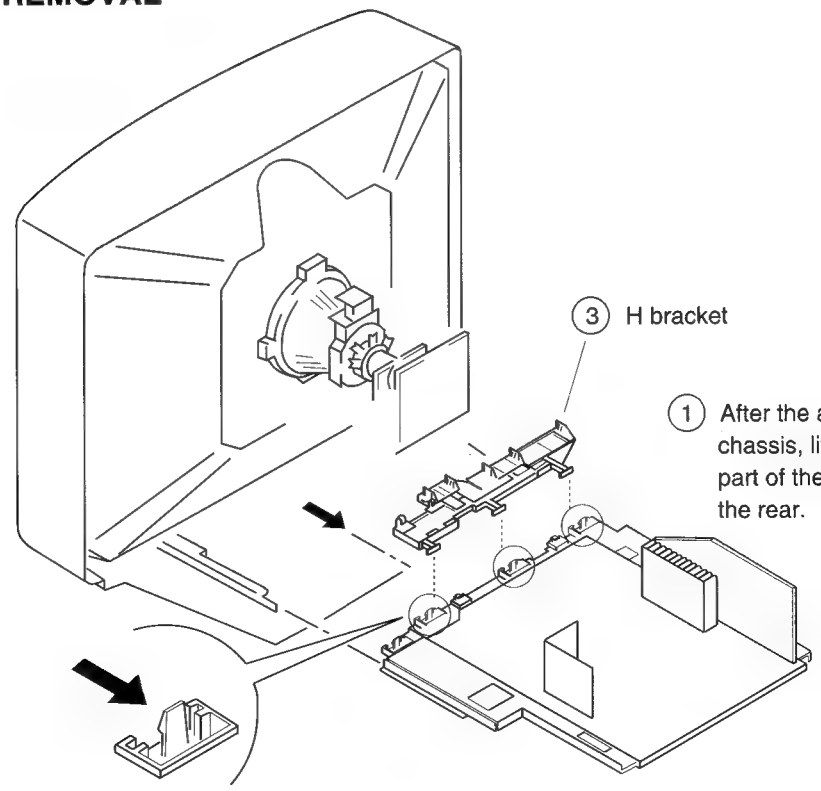

SONY
J
I
H
G
F
E
D
C
B
A
L
K

SECTION 2
DISASSEMBLY

2-1. REAR COVER REMOVAL

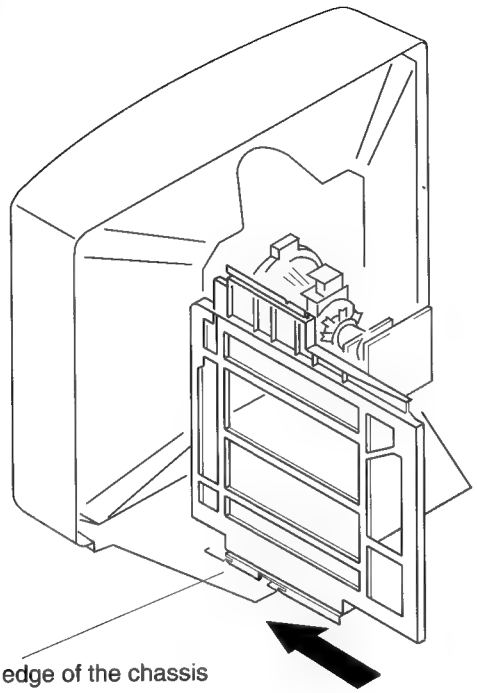


2-2. CHASSIS ASSY REMOVAL



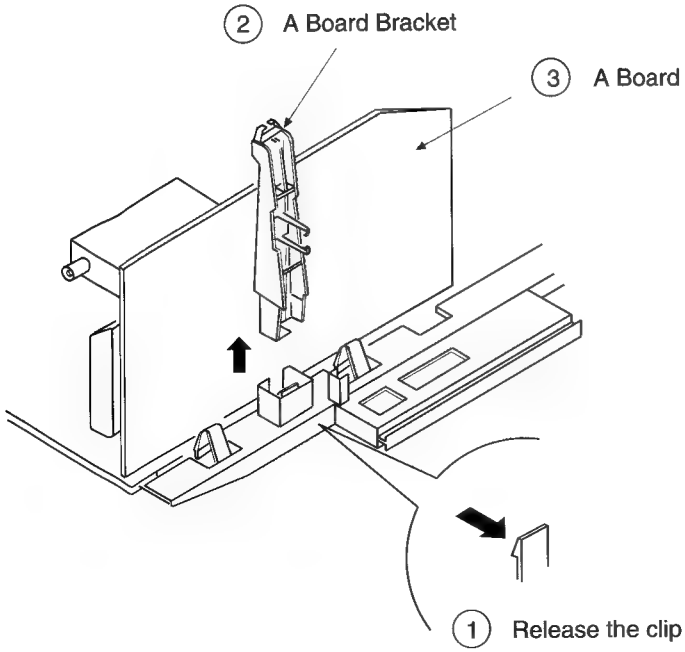
2 Push the three claws of the main chassis in the direction of the arrow and remove the H bracket upwards.

2-3. SERVICE POSITION



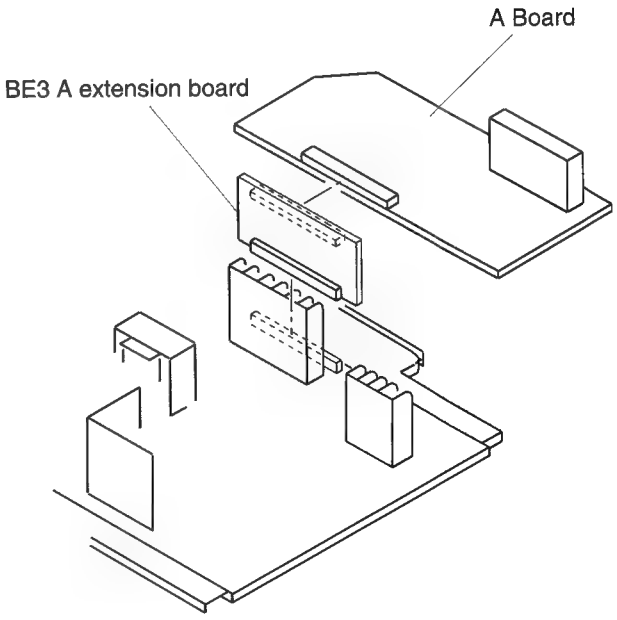
Locate the 2 slots on the edge of the chassis bracket in the locating holes and slide in the direction of the arrow

2-4. A BOARD REMOVAL

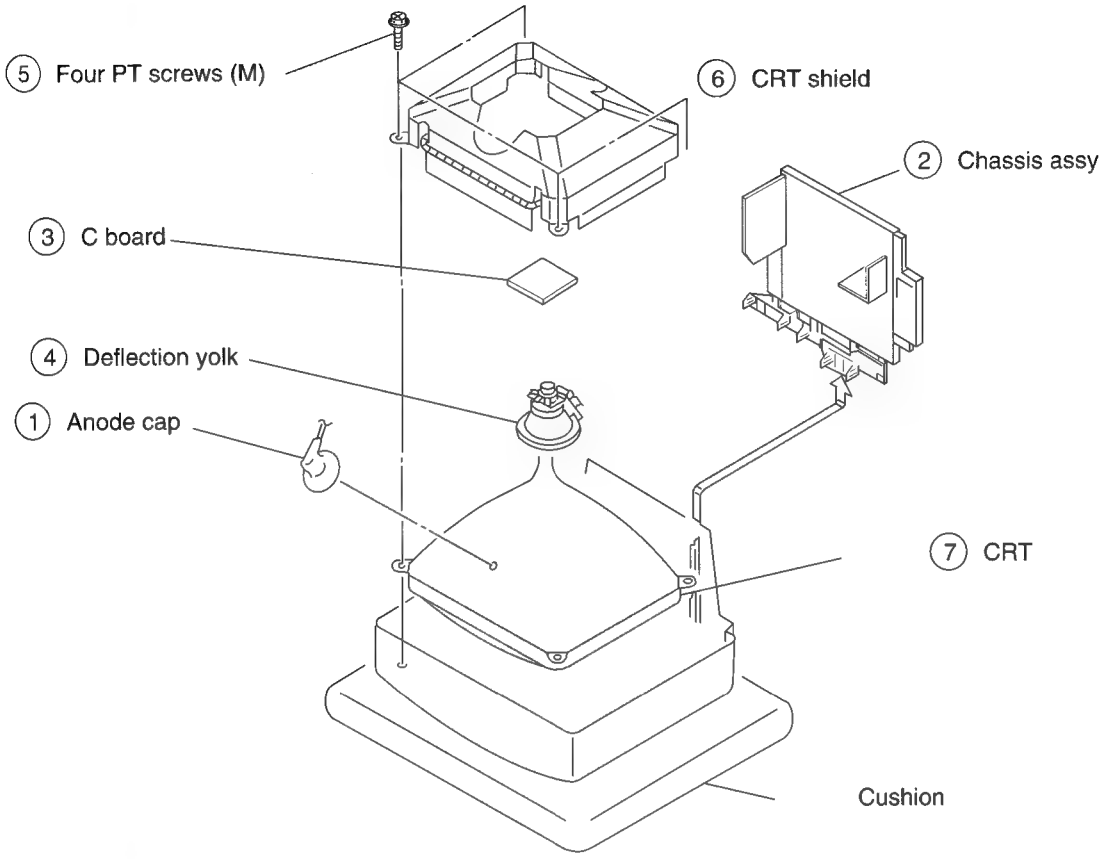


1 Release the clip by pressing in the direction of the arrow, shown and lift out the A board bracket

2-5. EXTENSION BOARD



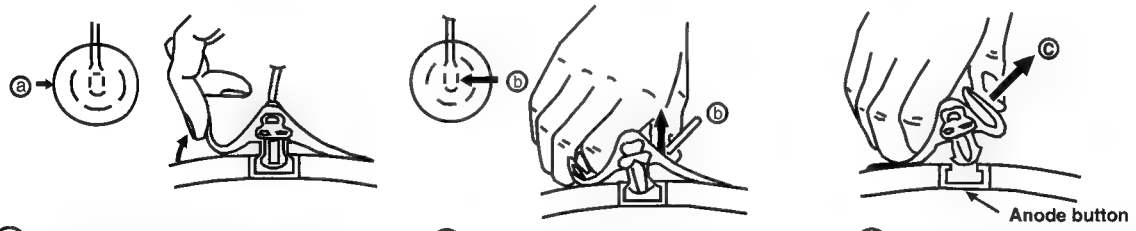
2-6. PICTURE TUBE REMOVAL



• REMOVAL OF ANODE-CAP

Note: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

*** REMOVING PROCEDURES.**



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ

② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ

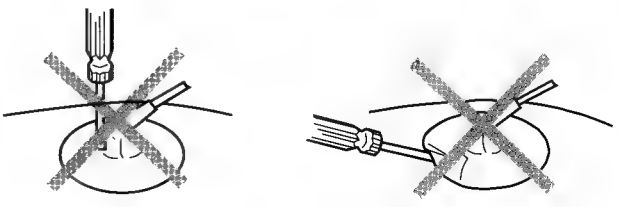
③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ⓒ

• HOW TO HANDLE AN ANODE-CAP

① Don't damage the surface of anode-cap with sharp shaped material !

② Don't press the rubber hardly not to hurt inside of anode-caps !
A metal fitting called as shatter-hook terminal is built into the rubber.

③ Don't turn the foot of rubber over hardly !
The shatter-hook terminal will stick out or damage the rubber.



SECTION 3
SET - UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there are specific instructions to the contrary, carry out these adjustments with the rated power supply.
- Unless there are specific instructions to the contrary, set the controls and switches to these settings :

◑ Contrast ..... 80% (or remote control normal)
☼ Brightness 50%

- Carry out the following adjustments in this order :

1. Beam landing
2. Convergence
3. Focus
4. White balance

Note: Testing equipment required.
1. Color bar/pattern generator
2. Degausser
3. DC power supply
4. Digital multimeter
5. Oscilloscope

Preparation:
- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the set's power and degauss with the degausser.

3-1. BEAM LANDING

1. Input the white signal with the pattern generator.
   CONTRAST, BRIGHTNESS } normal
2. Position neck assy as shown in Fig.3-2.
3. Set the pattern generator raster signal to red.
4. Move the deflection yoke forward and adjust with the purity control so that the red is at the center and the blue and the green take up equally sized areas on each side. (See Fig. 3-1 - 3-3)
5. Move the deflection yoke forward and adjust so that the entire screen becomes red. (See Fig. 3-1)
6. Switch the raster signal to blue, then to green and verify the condition.
7. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws.
8. If the beam does not land correctly in all the corners, use a magnet to adjust it. (See Fig. 3-4)

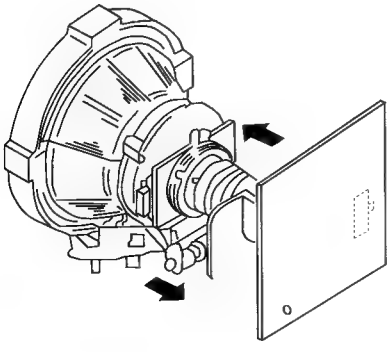


Fig. 3-1

Fig. 3-2

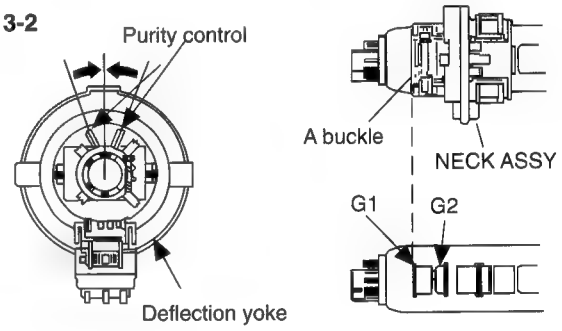
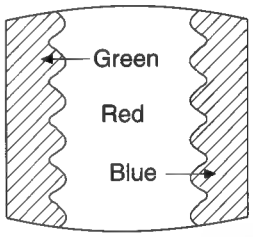


Fig. 3-3



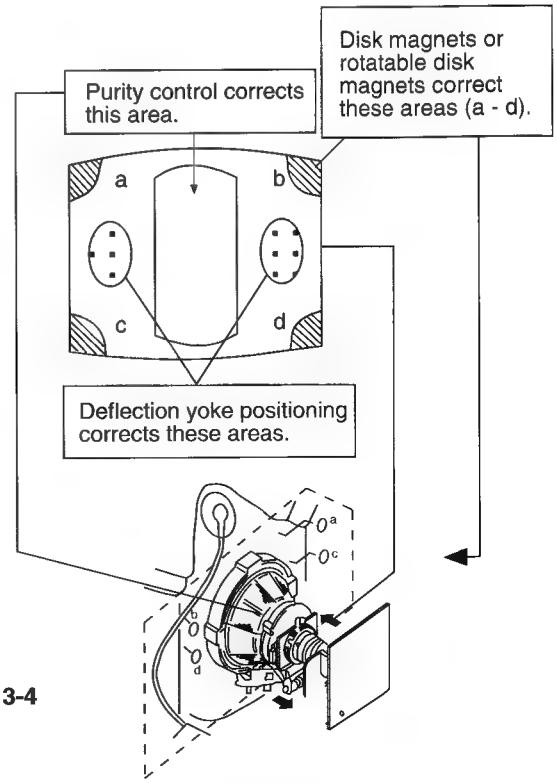


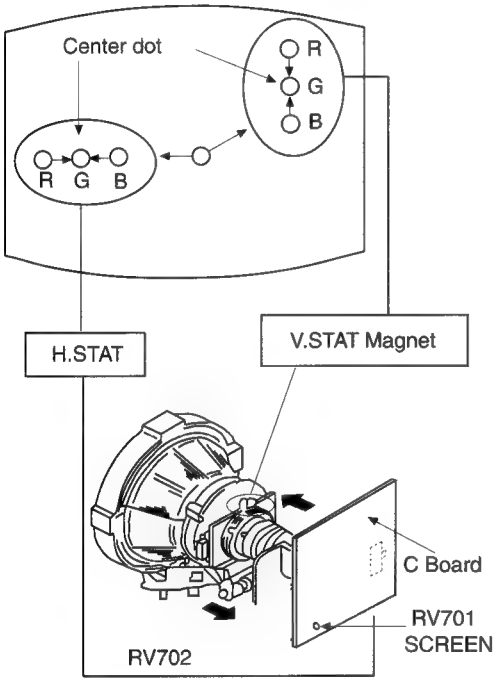
Fig. 3-4

3-2. CONVERGENCE

Preparation:

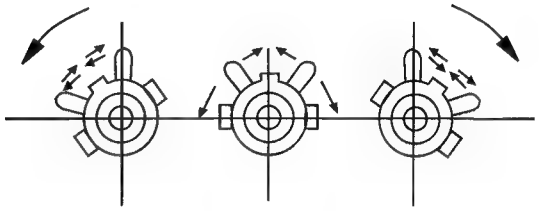
- Before starting this adjustment, adjust the focus, horizontal size, and vertical size.
- Minimize the brightness setting.
- Provide a dot pattern.

(1) Horizontal and vertical static convergence

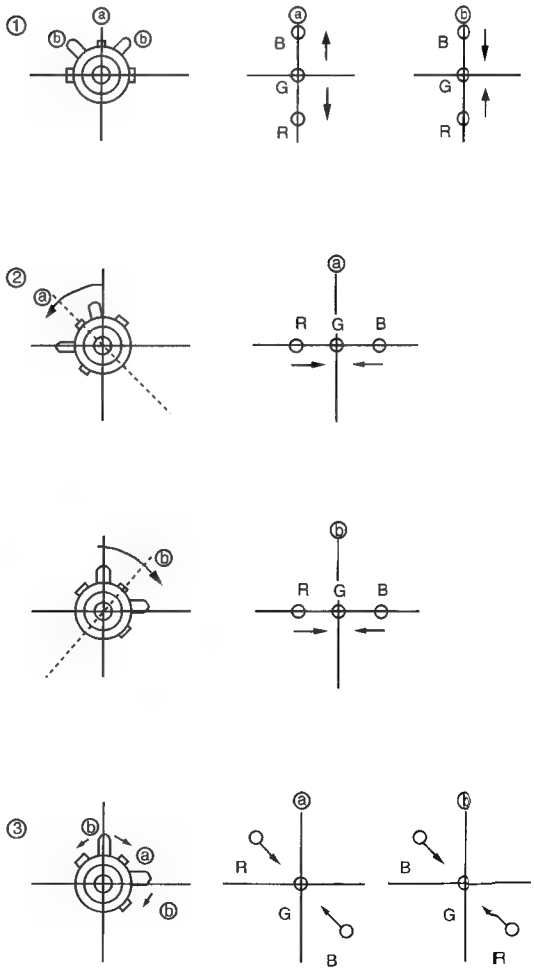


1. (Moving horizontally), adjust the H.STAT control so that the red, green, and blue points are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green, and blue points are on top of each other at the center of the screen.
3. If the H.STAT variable resistor cannot bring the red, green, and blue points together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner given below.
   (In this case, the H.STAT variable resistor and the V.STAT magnet influence each other)

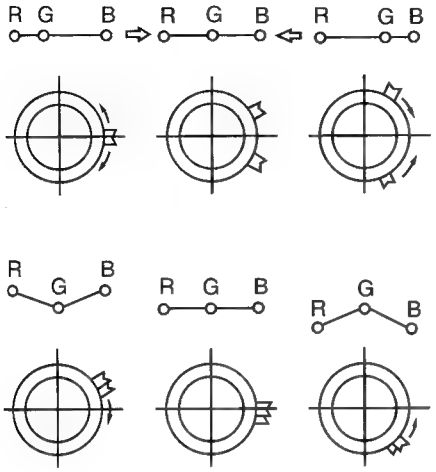
- Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.

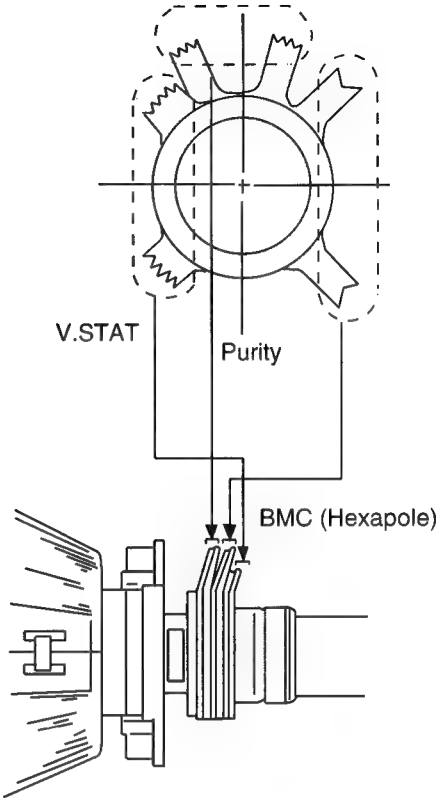


4. If the V.STAT magnet is moved in the direction of the (a) and (b) arrows, the red, green, and blue points move as shown below.



- Operation of BMC (Hexapole) Magnet





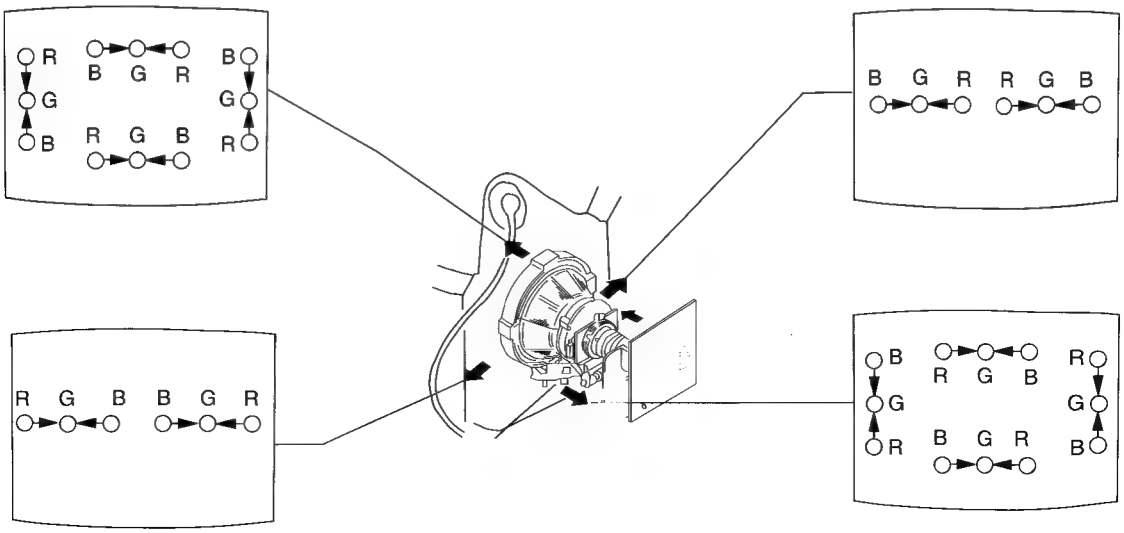
- The respective dot position resulting from moving each magnet interact, so be sure to perform adjustment while tracking.
  Use the H.STAT VR to adjust the red, green, and blue dots so they coincide at the center of the screen (by moving the dots in the horizontal direction).

(2) Dynamic convergence adjustment.

Preparation:

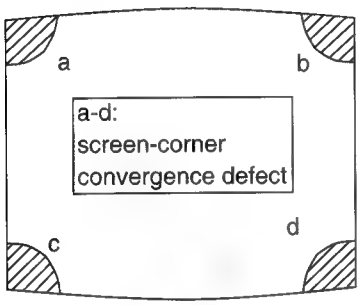
- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence.

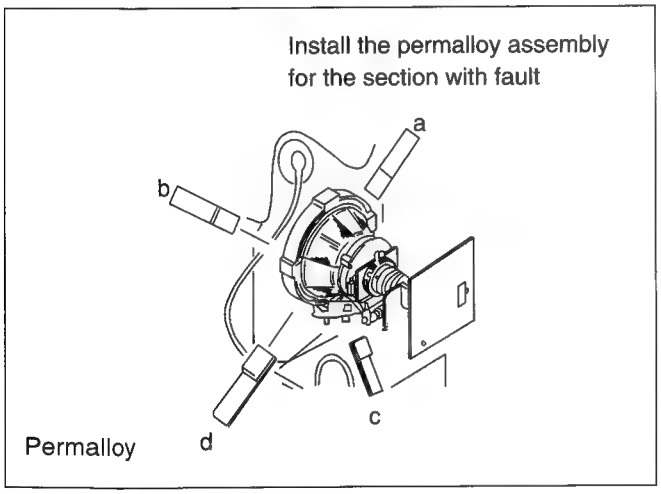
1. Slightly loosen the deflection yoke screws.
2. Remove the deflection yoke spacer.
3. Move the deflection yoke as shown in the figure below and optimize the convergence.
4. Tighten the deflection yoke screws.
5. Re-install the deflection yoke spacer.



(4) Screen corner convergence.

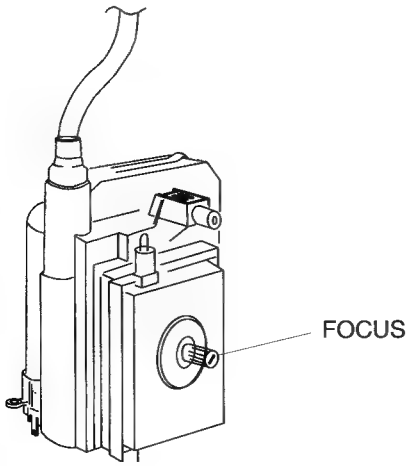
If you are unable to adjust the corner convergence properly, correct them with the use of permalloy assemblies.





3-3. Focus

Adjust the focus to optimize the screen.



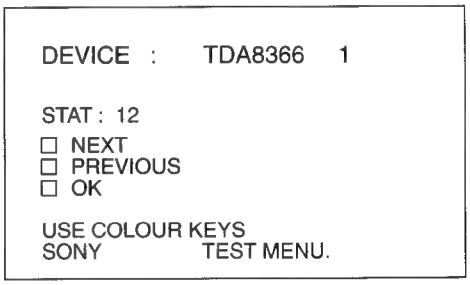
3-4. WHITE BALANCE

Screen G2 Setting

1. Input the dot signal from the pattern generator.
2. Set the picture brightness control to its lowest level.
3. Apply 180V DC to the R,G, and B cathodes with an external power supply.
4. While watching the picture, adjust G2 control RV701 (Screen) to the point just before the return lines disappear.

White balance adjustment

1. Receive an all-white signal.
2. Enter into service mode. (Refer to the section 4 "Electrical Adjustment" on how to enter service mode.)
3. Select TDA8366 1 on menu.



4. Press the White button on the Remote Commander to enter into the device Menu.
5. Press the Red button 10 times "Next" "Next" "Next" to select HWB RED, adjust to 040.
6. Press the Red button to select HWB GREEN, adjust with the + and - menu buttons so that the white balance becomes optimum.
7. Press the Red button to select HWB BLUE, adjust with the + and - menu buttons so that the white balance becomes optimum.
8. Press the TV button twice on the Remote Commander to store the data and return to TV operation.

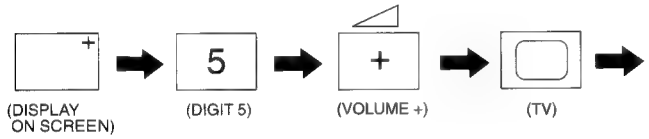
SECTION 4
CIRCUIT ADJUSTMENTS

4-1. ELECTRICAL ADJUSTMENTS

Service adjustment to this model can be performed with the supplied remote commander RM-833.

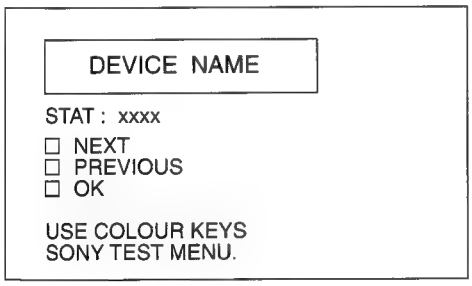
HOW TO ENTER INTO SERVICE MODE

1. Turn on the main power switch of the set and enter into standby mode.
2. Press the following sequence of buttons on the Remote Commander.

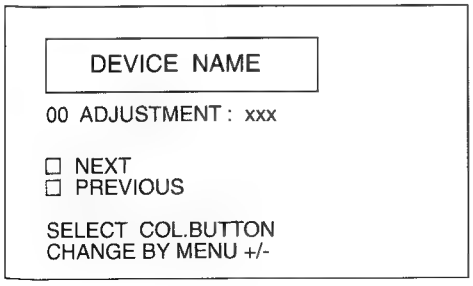


"TT " will appear in the top right corner of the screen. Other status information will also be displayed.

3. Press the MENU button on the Remote Commander to obtain the menu on the screen.



4. Press the Red (Next) and Green (Previous) buttons to select the device corresponding to the adjustment item from the table. Then press the White button (OK).



5. Press the Red (Next) or Green (previous) buttons to select the adjustment item. Then press the ▽ and △ buttons to change the data to comply with each standard.

6. Turn off the power to quit the service mode when adjustments are completed.

Initial Conditions for setup of TDA8366, and TDA6622

TDA8366 1	INIT VALUE	TDA8366 2	INIT VALUE
Hue	31	Interlace	00
H Shift	Adj	Sync Mode	00
H Size	Adj	Col Dec	00
Pin Amp	Adj	Vert Div	00
Corn Pin	Adj	Vid ID	00
Tilt	Adj	EHT Track	01
V.Linear	Adj	En V Grd	00
V.Size	Adj	Serv Blk	00
S.Corr	Adj	OVP Mode	00
V.Cent	Adj	Aspect R	00
HWB Red	Adj	Start Freq	00
HWB Green	Adj	Y/C Input	00
HWB Blue	Adj	PAL/NTSC	00
Peaking	8	Xtal PLL	00
Bright	32	Y Delay	07
Colour	32	RGB Blk	00
Picture	37	Noise Cor	00
AGC Set	00	Fast Blk	01
Srce Sel 1	00	AFC Wind	00
Srce Sel 2	00	IF Sensty	00
Time Con	03	Mod Std	00
Xtal Ind	03	Vid Mute	01
FF Freq	02		

TDA6622	INIT VALUE	TDA6622	INIT VALUE
MPX Per	00	Mute 2	01
Quasi St	00	C1/2LS	00
Bass Exp	00	C1/2KH	00
H Pulse	00	Mono	01
Matrix St	00	Scart	00
Bypass	00	Scart D	00
Vol L Sp	31	AM	00
Vol R Sp	31		
Vol HP	00		
Pll Sync	00		
Mute 3	01		
Treble	07		
Bass	15		
X Talk Adj			
Mute 1	00		

4-2. TEST MODE 2 :

Is available by pressing Test button twice, OSD 'TT ' appears. The functions described below are available by pressing the two numbers. To release the Test Mode 2, press 0 twice, or switch the TV into Stand-by Mode.

00	switch Test Mode 2 off
01	picture maximum
02	picture minimum
03	Volume 35%
04	Volume 50%
05	Volume 65%
06	Volume 80%
07	Ageing Condition (Volume min., Picture max., Brightness max.
08	Shipping Condition (Analog Values are RESET due to factory setting, Prog 1 is selected, TT Mode is switched off)
09	"Menu" Flag request
10	Tenth entry is deleted
11	dummy
12	dummy
13	dummy
14	Forced AV 16:9 detection on/off
15	Read factory setting from NVM Reads Volume, Balance, Treble, Bass, Brightness, Contrast, Hue, Sharpness, Colour values from ROM to the actual used values (Last Power Memory)
16	Save actual used values as RESET values Memorize actual used values Balance, Treble, Bass, Hue, Sharpness at RESET position in NVM.
17	Preset Label for AV Sources
18	RGB Priority on/off
19	Clear all preset labels
20	Tenth entry is deleted
21	Sub Contrast
22	Sub Colour
23	Sub Brightness
24	Set destination = U RGB Priority = Off
25	Set destination = D RGB Priority = Off
26	Set destination = B RGB Priority = On
27	Set destination = K RGB Priority = Off
28	Set destination = L RGB Priority = Off
29	Set destination = E RGB Priority = Off
30	Tenth entry is deleted
31	Set Destination = A RGB Priority = On
32	dummy
33	Auto AGC
34	N/S Pin Adjust
35	Manual AGC Adjust
36	dummy
37	dummy
38	dummy
39	dummy
40	Tenth entry is deleted
41	Re-initialise NVM
42	Production use only
43	Initialise Geom Settings
44	Initialise all favorite pages = 100
45	Channel locks = off
46	IR Channel Pressetting Mode The channel pressetting can be done by a Special IR Transmitter (Ver 2 and above software only)
47	dummy
48	Set NVM testbyte to 44h
49	Erase the NVM Testbyte (this byte detects already stored NVM's) After selecting this function, switch TV Off and On -> the NVM will be preset by µ-Controller.

In Test Mode the Menu display is switchable by the Speaker-Off button.

Note : For Test Modes 41 - 49 it is necessary to ensure that the TV is set to Prog 59.

SUB BRIGHTNESS ADJUSTMENT

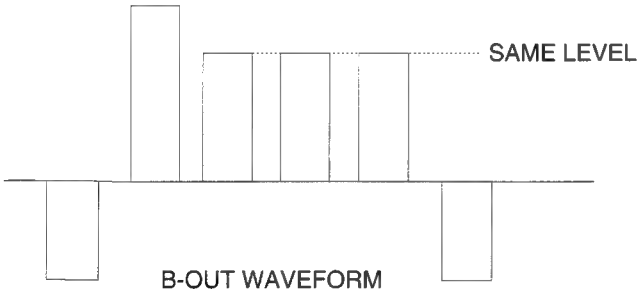
1. Input a Phillips pattern.
2. Enter into service mode and press 23.
3. Adjust data so that 0-IRE of grey scale and CUT-OFF 20-IRE are only slightly visible on screen.

SUB CONTRAST ADJUSTMENT

1. Input a video that contains a small 100% area on a Black Background.
2. Enter into service mode and press 01 to have PIC max followed by 21.
3. Connect oscilloscope to pin (1) of CN703 (R OUT) and adjust HWB Red data of TDA8366 1 to obtain 2.3Vp-p.

SUB COLOR ADJUSTMENT

1. Input a PAL color bar signal.
2. Connect an oscilloscope to pin (3) of CN703 (B OUT) on the C board.
3. Enter into service mode and press 22.
4. Adjust data so that the right sides of the waveform are set to the same level.



I.F. COIL ADJUSTMENT (T101) - B/G, D/K, I AND L STANDARD FOR CONTINENTAL MODELS.

1. Apply a 38.9MHz signal at 100dBuV to the input of SWF101.
2. Receive a channel so that the I.C. is selected for negative modulation.
3. Measure the voltage at the AFT test point and adjust (T101) to obtain 2.4V +/- 0.2V.

I.F. COIL ADJUSTMENT (T101) - I, STANDARD FOR U.K. MODELS.

1. Apply a 39.5MHz signal at 100dBuV to the input of SWF101.
2. Receive a channel so that the I.C. is selected for negative modulation.
3. Measure the voltage at the AFT test point and adjust (T101) to obtain 2.4V +/- 0.2V.

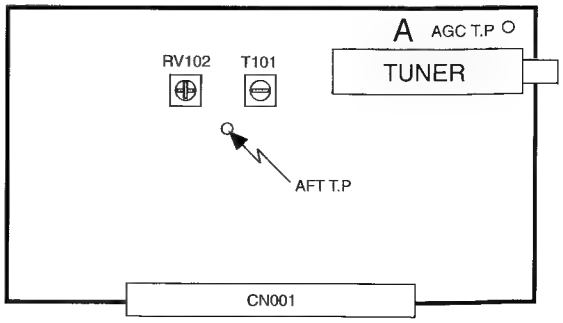
L, BAND 1 ADJUSTMENT (RV102) - L, STANDARD FOR FRENCH MODELS.

1. Apply a 33.95MHz signal at 100dBuV to the input of SWF101.
2. Receive a channel so that the I.C. is selected for positive modulation and system L band 1.
3. Measure the voltage at the AFT test point and adjust (RV102) to obtain 2.4V +/- 0.2V.

Note : Only adjust RV102 after T101 has been correctly adjusted.

AGC ADJUSTMENT

1. Receive an off- air signal.
2. Enter the service mode, ("Test" "Test") and 35.
3. Adjust the data so that there is no snow or cross - modulation visible on the screen.
4. Change the receiving off-air channel, and confirm the above status.



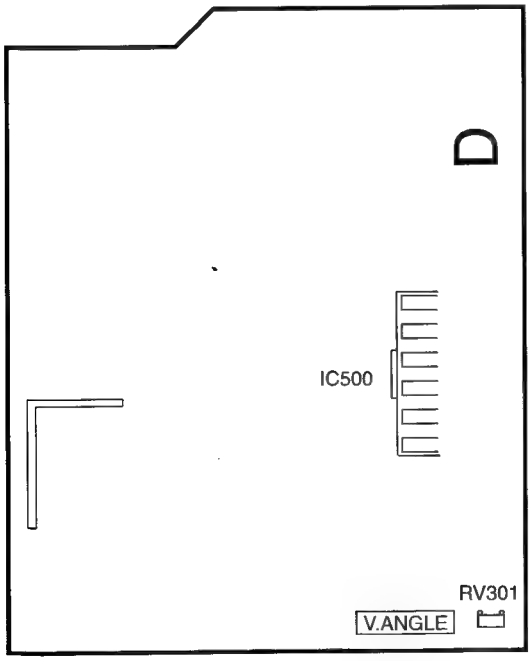
- A Board component side -

DEFLECTION SYSTEM ADJUSTMENT

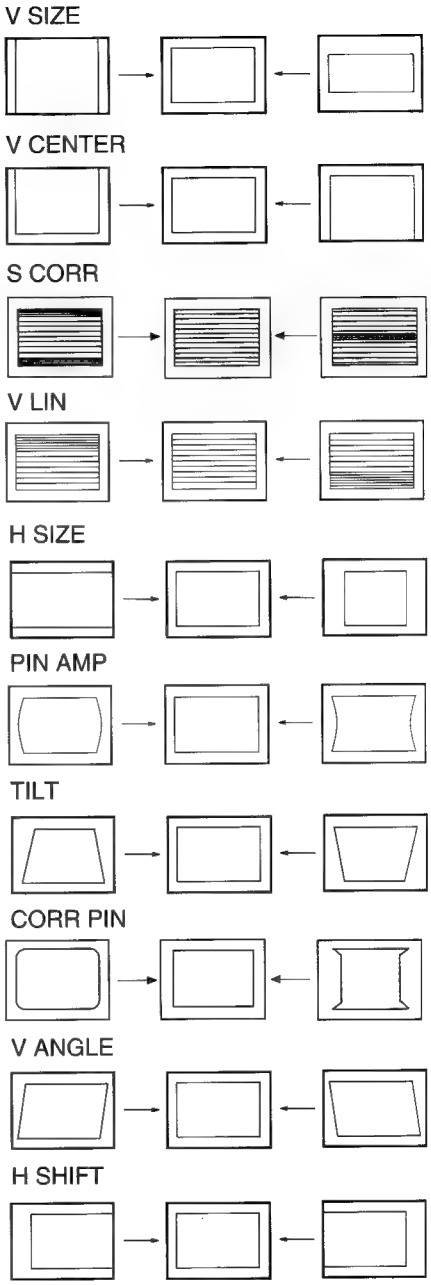
1. Enter into service mode.
2. Select and adjust each item in order to obtain the optimum image.

Item No	Adjustment item.	Data Amount
03	H SHIFT	ADJ.
04	H SIZE	ADJ.
05	PIN AMP	ADJ.
06	CORR PIN	ADJ.
07	TILT	ADJ.
08	V LINEAR	ADJ.
09	V SIZE	ADJ.
0A	S CORR	ADJ.
0B	V CENTER	ADJ.

Note : V ANGLE is adjusted by a Variable Resistor on the 'D' Board (RV301)



- D Board Component Side -



4-3. BE3 SELF DIAGNOSTIC SOFTWARE

The identification of errors within the BE-3 chassis is triggered in 1 of 2 ways :- 1: Bus busy or 2: Device failiure to respond to IIC. In the event of one of these situations arrising the software will first try to release the bus if busy (Failiure to do so will report with continous flashing LED) and then communicate with each device in turn to establish if a device is faulty. If a device is found to be faulty the relevant device number will be displayed through the led (Series of flashes which must be counted) See Table 1., on fatal errors are reported with this method.

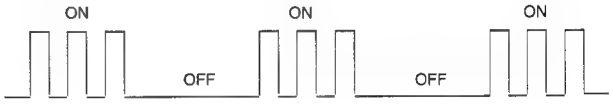
If a fatal error is found the set will simply stay in whichever state it was when the error occured, but if a non fatal error occurs the set will try to continue operation.

Table 1

Device	LED Error Count	Fatal Error
NVM	2 .. 9	√
Teletext	10	
Jungle	11	√
Video_sw	12	
Tuner	13	√
Nicam	14	
Audio_cont	15	√

Flash Timing Example : e.g. error number 3.

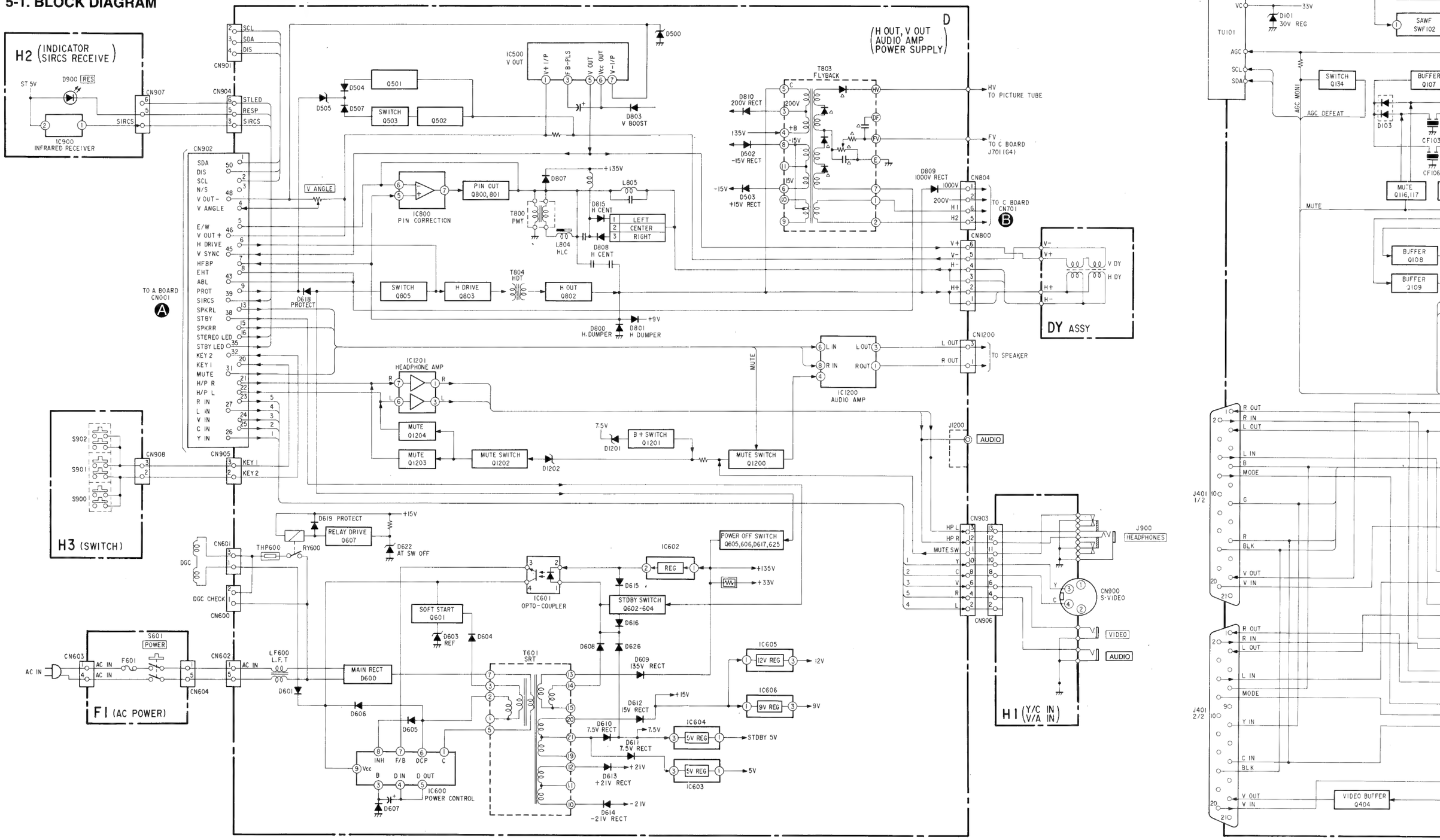
Stby LED



MEMO

SECTION 5
DIAGRAMS

5-1. BLOCK DIAGRAM



D
(H OUT, V OUT
AUDIO AMP
POWER SUPPLY)

T803
FLYBACK

D810
1000V RECT

D502
15V RECT

D503
15V RECT

D809
1000V RECT

CN804

CN800

HV
TO PICTURE TUBE

FV
TO C BOARD
J701 (G4)

TO C BOARD
CN701
B

V DY

H DY

DY ASSY

CN1200

TO SPEAKER

IC1200
AUDIO AMP

MUTE SWITCH
Q1200

J1200

AUDIO

ER OFF SWITCH
05,606,D617,625

+135V

+33V

CN903

CN906

J900
HEADPHONES

CN900
S-VIDEO

VIDEO

AUDIO

HI (Y/C IN)
(V/A IN)

IC605
12V REG
12V

IC606
9V REG
9V

STDBY 5V

5V

IC101
VIF/SIF

IF AMP
Q102

SAWF
SWF101

SAWF
SWF102

D101
30V REG

TU101

SWITCH
Q134

BUFFER
Q107

D103

CF103
CF104
CF106

MUTE
Q116,117

MUTE
Q123,124

AGC MONI

AGC DEFEAT

MUTE

VIDEO AMP
Q132,131

BUFFER
Q130

BUFFER
Q133

T101
77.8MHz

CF102

AFT

AGC ADJ

SYS

IC202
SYNC SEP

SYNC SEP

PHASE
COMP

H OSC

SYNC AMP
Q120

OSC BUFFER
Q114

IC201
AUDIO SELECT

BUFFER
Q108

BUFFER
Q109

SDA/SCL

IC1002
VIDEO PROCESSER

SYNC BUFFER
Q1001

IC1001

X1001
13.875MHz

IC1003
RGB SW

IC301
JUNGLE

IC302

IC303

X301
3.58MHz
4.43MHz

AMP
Q314

VM AMP
Q381

VM OUT
Q313,312

MUTE
Q380

(HFBP)

J401
1/2

J401
2/2

IC401
A/V SELECT

AGC ADJ/AFT/SYS

SDA/SCL/AGC MONI/AGC/MUTE

BLK

BLK BUFFER
Q406

D1002
SWITCH

RGB PROT
Q401

V BUFFER
Q403

BUFFER
Q402

VIDEO BUFFER
Q404

IC001
MICRO COMPUTER

SWITCH
Q12

SWITCH
Q14

IC002
NVM

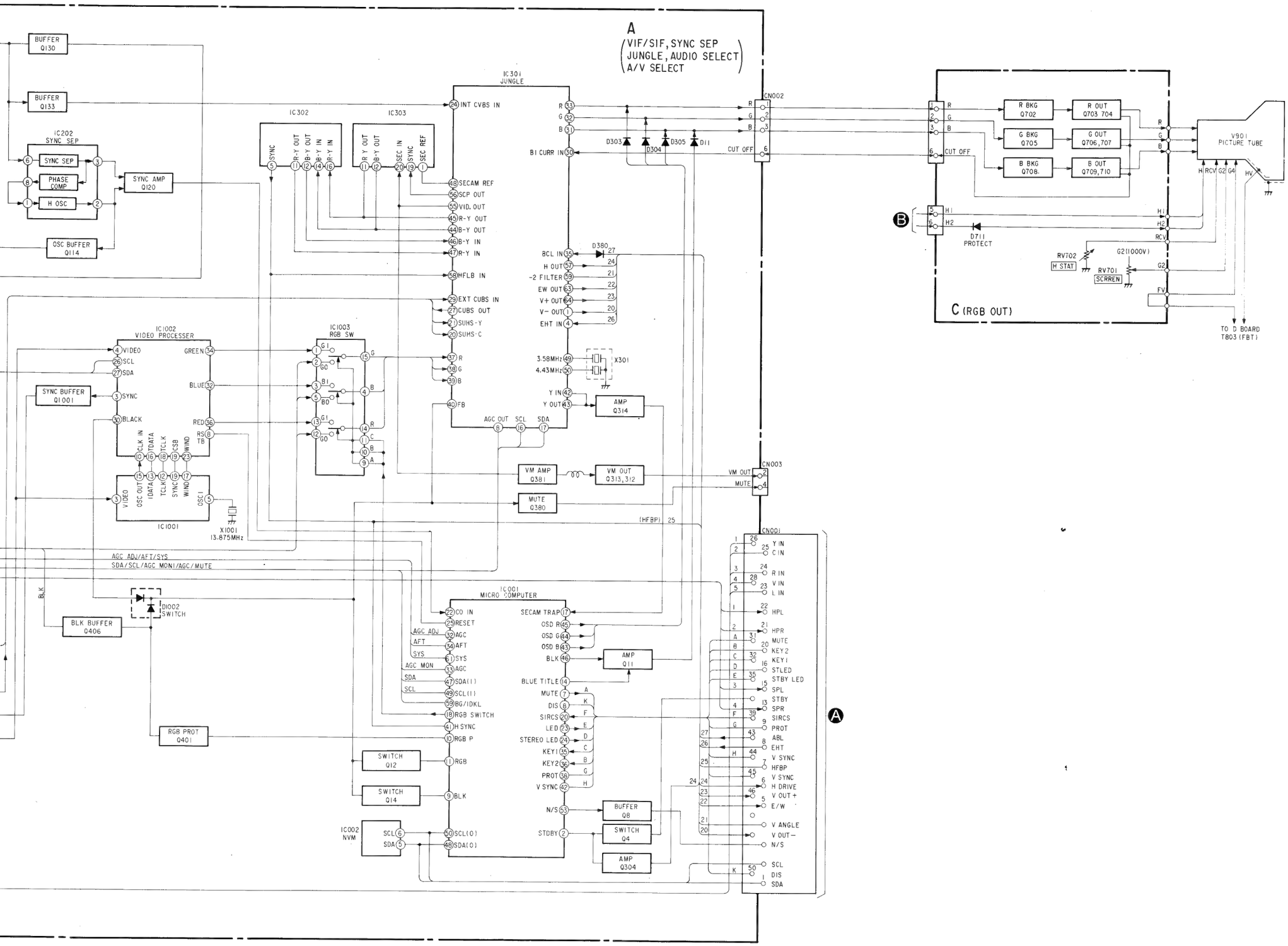
AMP
Q11

BUFFER
Q8

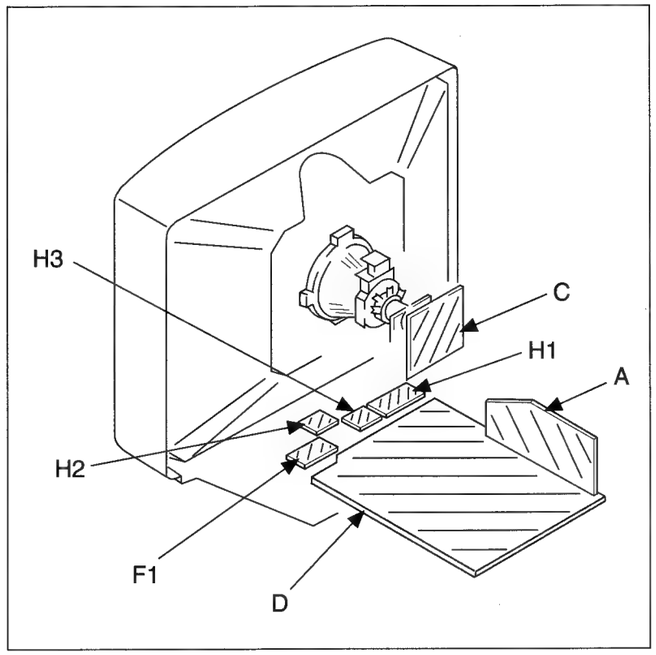
SWITCH
Q4

AMP
Q304

A
(VIF/SIF,
JUNGLE,
A/V SEL


A
(VIF/SIF, SYNC SEP
JUNGLE, AUDIO SELECT
A/V SELECT)
BUFFER Q130
BUFFER Q133
IC202 SYNC SEP
SYNC SEP
PHASE COMP
H OSC
SYNC AMP Q120
OSC BUFFER Q114
IC301 JUNGLE
IC302
IC303
INT CVBS IN
SECAM REF
SCP OUT
VID. OUT
R-Y OUT
B-Y OUT
B-Y IN
R-Y IN
HFLB IN
EXT CUBS IN
CUBS OUT
SUHS-Y
SUHS-C
R
G
B
B I CURR IN
CUT OFF
D303
D304
D305
D11
CN002
R BKG Q702
G BKG Q705
B BKG Q708.
R OUT Q703 704
G OUT Q706,707
B OUT Q709,710
V901 PICTURE TUBE
H1
H2
D711 PROTECT
RV702 H STAT
RV701 SCRREN
G2(1000V)
FV
C (RGB OUT)
TO D BOARD T803 (FBT)
IC1002 VIDEO PROCESSER
IC1003 RGB SW
SYNC BUFFER Q1001
BCL IN
H OUT
-2 FILTER
EW OUT
V+ OUT
V- OUT
EHT IN
D380
3.58MHz
4.43MHz
X301
Y IN
Y OUT
AMP Q314
AGC OUT
SCL
SDA
VM AMP Q381
VM OUT Q313,312
MUTE Q380
CN003
VM OUT
MUTE
(HFBP)
CN001
IC1001
X1001 13.875MHz
AGC ADJ/AFT/SYS
SDA/SCL/AGC MONI/AGC/MUTE
BLK
D1002 SWITCH
BLK BUFFER Q406
IC001 MICRO COMPUTER
CO IN
RESET
AGC
AFT
SYS
SDA(1)
SCL(1)
BG/IDKL
RGB SWITCH
H SYNC
RGB P
RGB
BLK
SECAM TRAP
OSD R
OSD G
OSD B
BLK
AMP Q11
BLUE TITLE
MUTE
DIS
SIRCS
LED
STEREO LED
KEY1
KEY2
PROT
V SYNC
N/S
STDBY
BUFFER Q8
SWITCH Q4
AMP Q304
RGB PROT Q401
SWITCH Q12
SWITCH Q14
IC002 NVM
SCL
SDA
SCL(0)
SDA(0)
Y IN
C IN
R IN
V IN
L IN
HPL
HPR
MUTE
KEY2
KEY1
STLED
STBY LED
SPL
STBY
SPR
SIRCS
PROT
ABL
EHT
V SYNC
HFBP
V SYNC
H DRIVE
V OUT+
E/W
V ANGLE
V OUT-
N/S
SCL
DIS
SDA

5-2. CIRCUIT BOARDS LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note :

- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytic.
- Indication of resistance, which dose not have one for rating electrical power, is as follows.

Pitch : 5mm Rating electrical power : ¼W

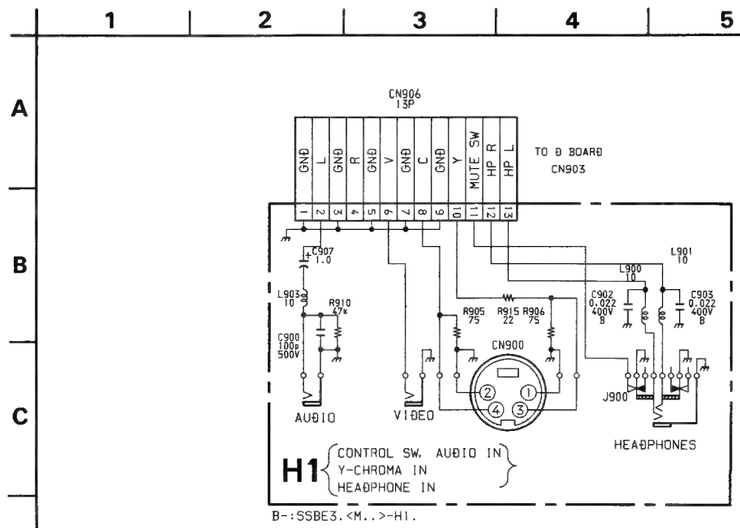
- Chip resistor is in 1/10W.
- All resistors are in ohms. kΩ = 1000Ω, MΩ = 1000KΩ
- : nonflammable resistor.
- : fusible resistor.
- △ : internal component.
- : panel designation or adjustment for repair.
- All variable and adjustable resistors have charactristic curve B, unless otherwise noted.
- All voltages are in V.
- Readings are taken with a 10MΩ digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
- : B+ bus.
- : B− bus.
- : signal path.(RF)
- : earth - ground
- : earth - chassis

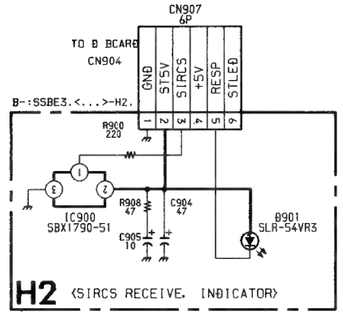
Reference information

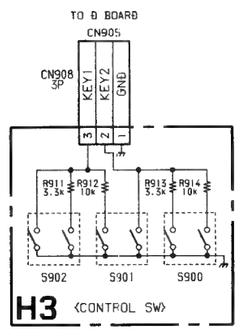
RESISTOR	RN	: METAL FILM
	RC	: SOLID
	FPRD	: NONFLAMMABLE CARBON
	FUSE	: NONFLAMMABLE FUSIBLE
	RS	: NONFLAMMABLE METAL OXIDE
	RB	: NONFLAMMABLE CEMENT
	RW	: NONFLAMMABLE WIREWOUND
	※	: ADJUSTMENT RESISTOR
COIL	LF-8L	: MICRO INDUCTOR
CAPACITOR	TA	: TANTALUM
	PS	: STYROL
	PP	: POLYPROPYLENE
	PT	: MYLAR
	MPS	: METALIZED POLYESTER
	MPP	: METALIZED POLYPROPYLENE
	ALB	: BIPOLAR
	ALT	: HIGH TEMPERATURE
	ALR	: HIGH RIPPLE

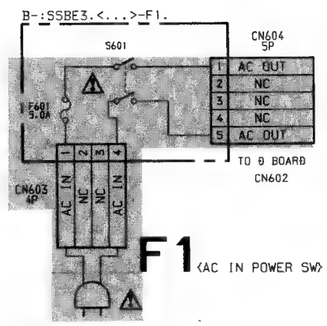
Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par une trame et par une marque ⚠ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.



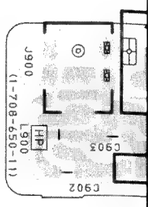




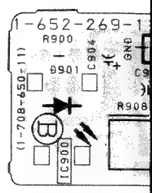


H1

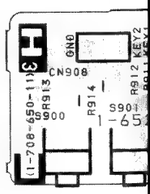
– H1 BOARD –



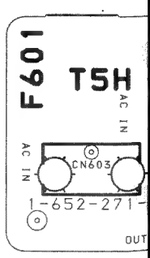
– H2 BOARD –



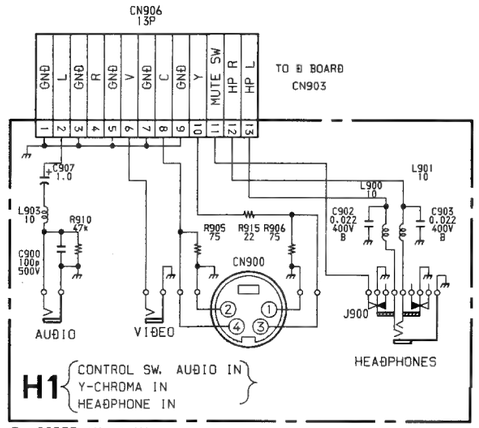
– H3 BOARD –

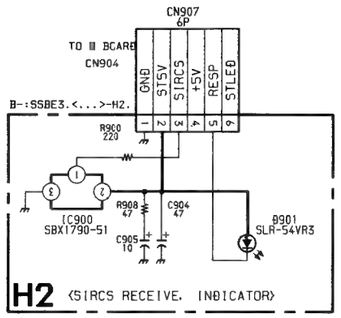


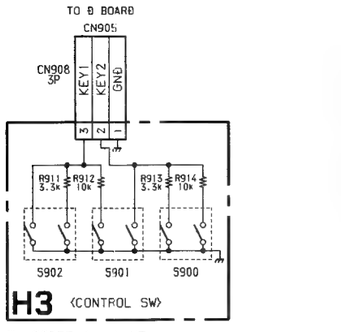
– F1 BOARD –

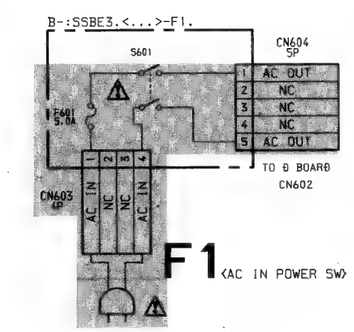


H1 [CONTROL SW, AUDIO IN Y-CHROMA IN, HEADPHONE IN] **H2** [SIRCS RECEIVE INDICATOR] **H3** [CONTROL SW] **F1** [AC IN POWER SW] **D** [HV OUT PIN OUT POWER SUPPLY]

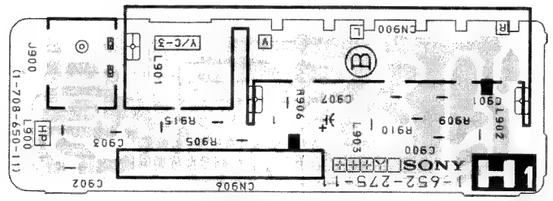




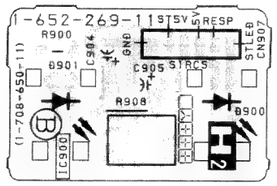




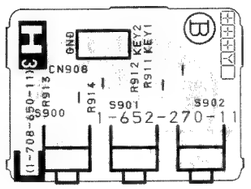
– H1 BOARD –



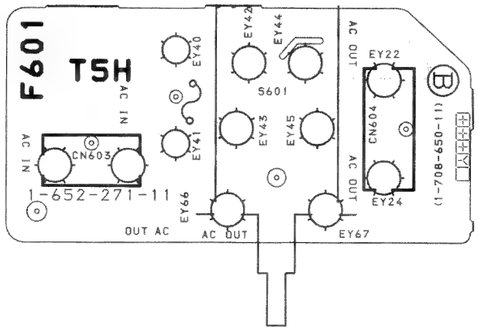
– H2 BOARD –



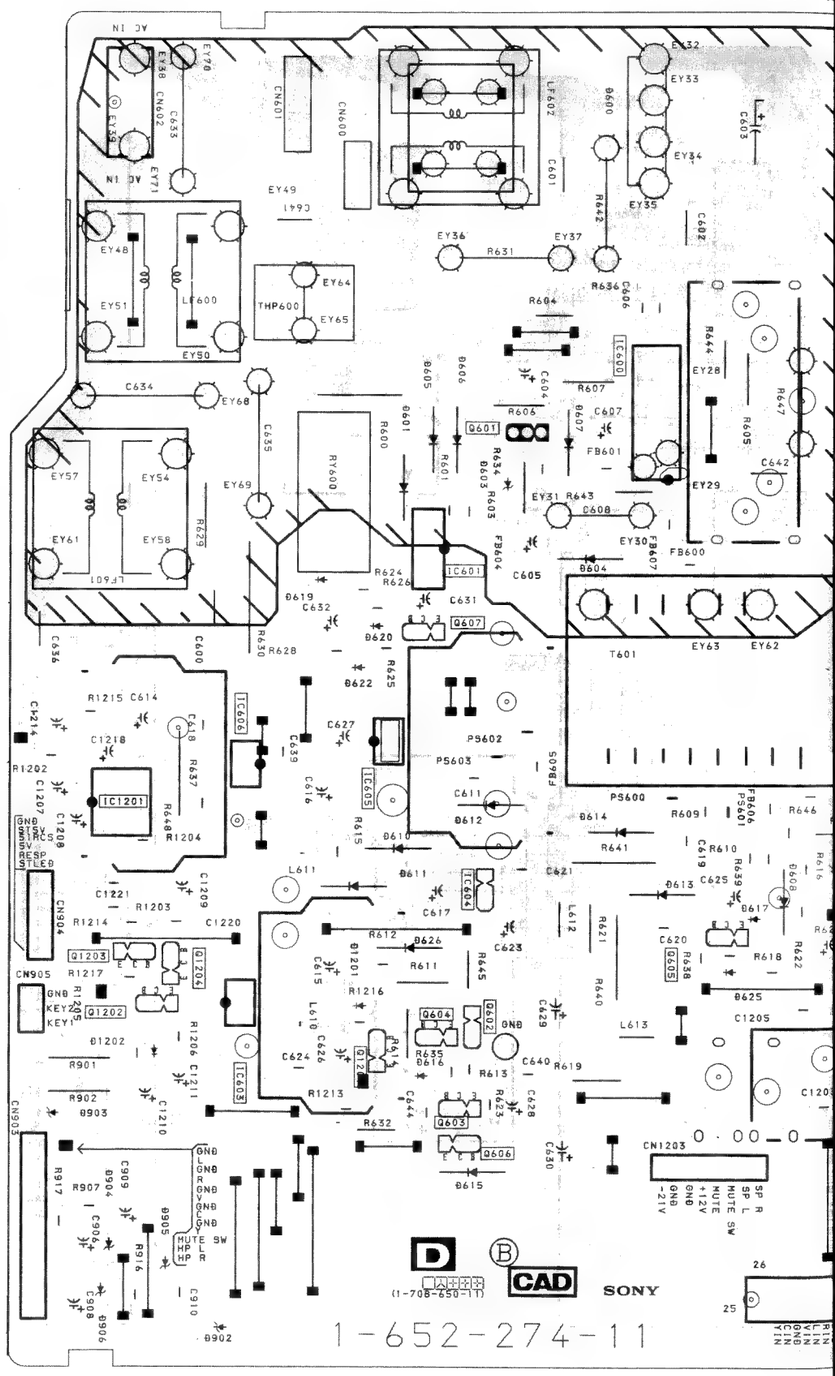
– H3 BOARD –



– F1 BOARD –

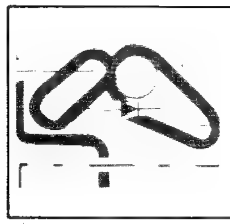


– D BOARD –

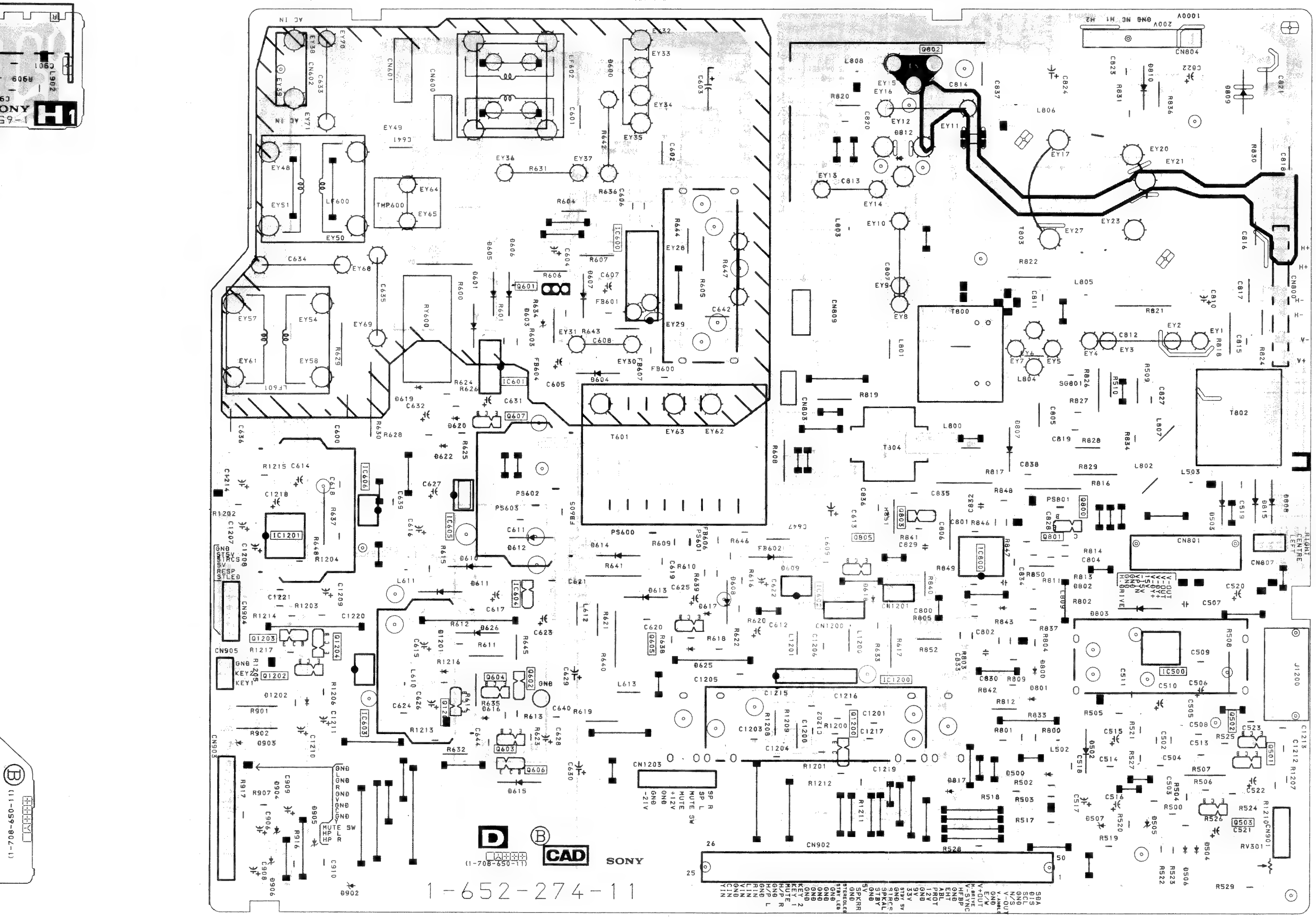


H2 [SIRCS RECEIVE INDICATOR] **H3** [CONTROL SW] **F1** [AC IN POWER SW] **D** [HV OUT PIN OUT POWER SUPPLY]

– D BOARD –



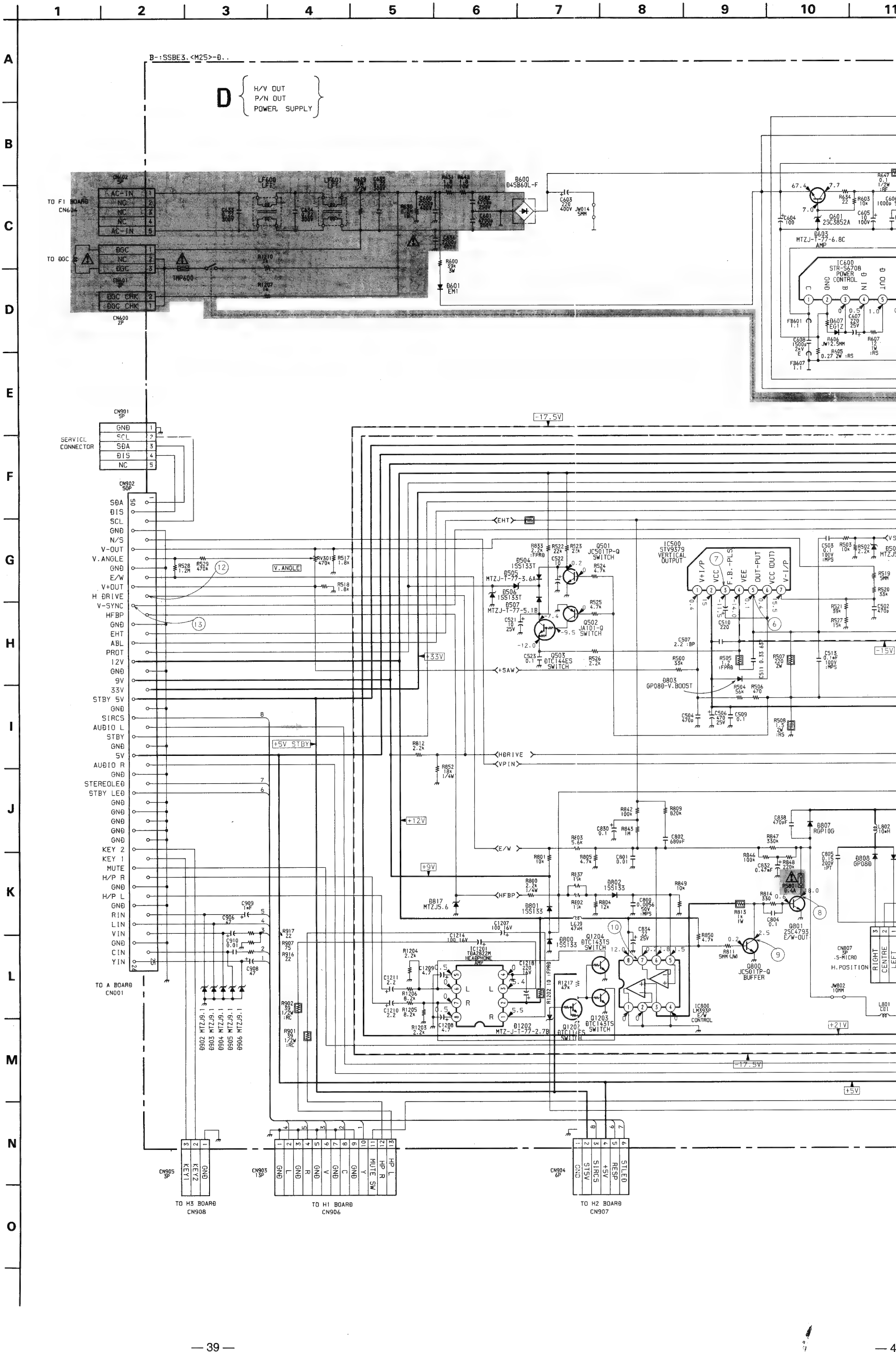
NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

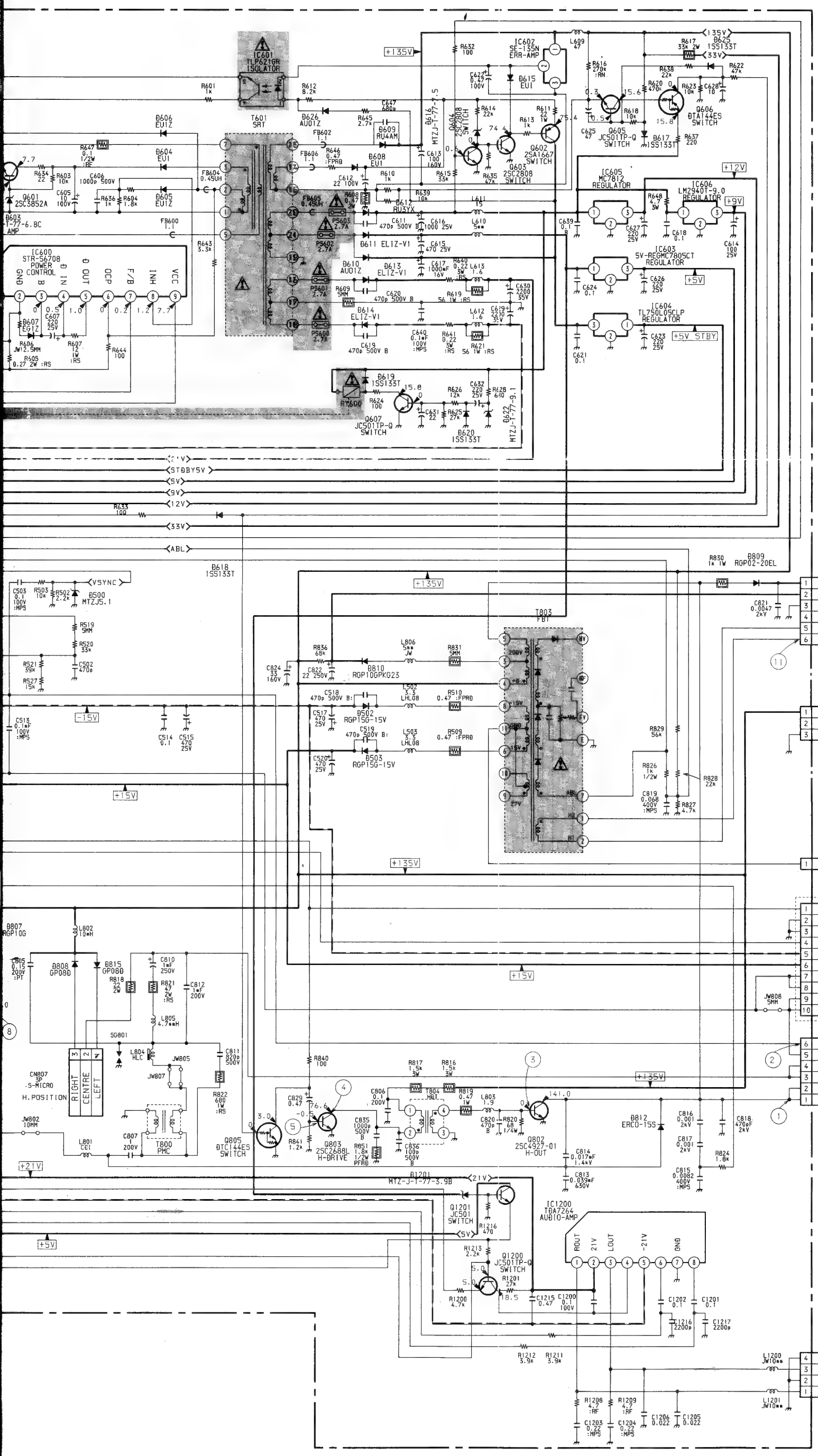


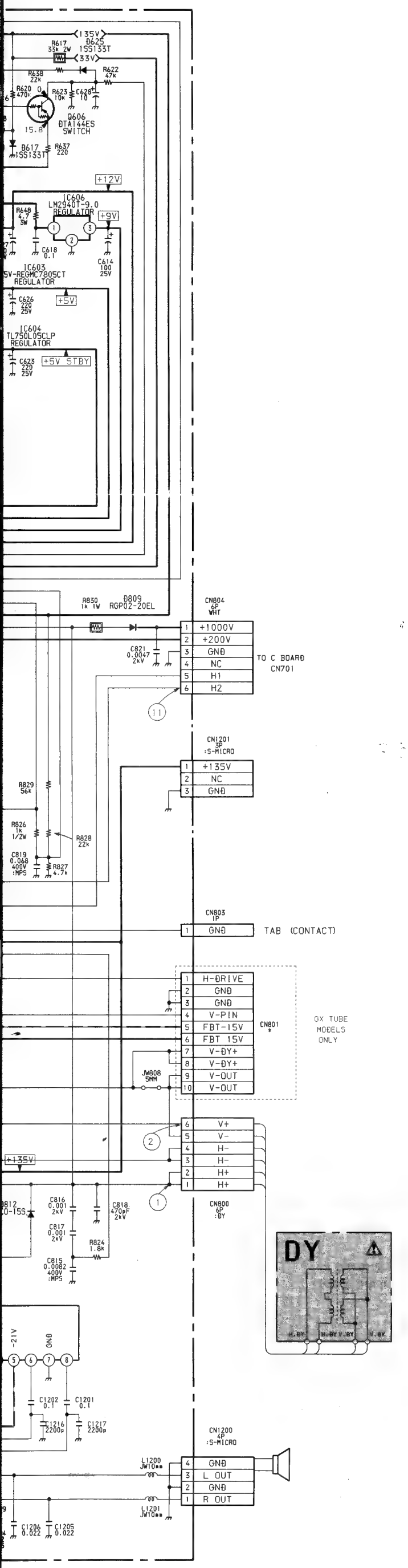
IC	
IC500	G - 10
IC600	C - 5
IC601	D - 4
IC602	F - 7
IC603	H - 2
IC604	F - 4
IC605	F - 3
IC606	E - 2
IC800	F - 8
IC1200	G - 7
IC1201	F - 1

TRANSISTOR	
Q501	H - 11
Q502	H - 11
Q503	I - 11
Q601	C - 4
Q602	G - 4
Q603	H - 3
Q604	G - 3
Q605	G - 5
Q606	H - 4
Q607	E - 4
Q800	E - 9
Q801	F - 9
Q802	A - 8
Q803	F - 7
Q805	F - 7
Q1200	H - 7

DIODE	
D500	G - 9
D502	G - 9
D503	F - 10
D504	I - 10
D505	I - 10
D506	I - 10
D507	G - 9
D600	A - 4
D601	C - 3
D603	D - 4
D604	D - 4
D605	C - 3
D606	C - 4
D607	C - 4
D608	F - 6
D609	F - 6
D610	F - 3
D611	F - 3
D612	F - 4
D613	F - 5
D614	F - 4
D615	H - 4
D616	G - 3
D617	F - 5
D618	F - 7
D619	D - 2
D620	E - 3
D622	E - 3
D625	G - 5
D626	G - 3
D800	G - 9
D801	G - 9
D802	F - 9
D803	F - 9
D807	E - 9
D808	E - 11
D809	A - 11
D810	A - 10
D812	B - 7
D815	E - 11
D817	H - 8
D902	I - 2
D903	H - 1
D904	H - 1
D905	H - 2
D906	I - 1


B-:SSBE3.<M25>-0..
D
H/V OUT
P/N OUT
POWER SUPPLY
CN602 5P
AC-IN
NC
NC
NC
AC-IN
TO F1 BOARD CN604
DGC
NC
DGC
TO DGC
DGC CHK
DGC CHK
CN600 2P
LF600
LF601
D600 D4SB60L-F
C603 220 400V JW014 5MM
C600 2200p 400V
C602 4700p 250V
C601 4700p 250V
C434 2200 250V
R600 39k 5W
D601 EM1
THP600
R1210 1k
R1207 1k
R647 0.1 1/2W :RF
R634 22
R603 10k
C604 100
C605 10 100V
Q601 2SC3852A
D603 MTZJ-T-77-6.8C AMP
IC600 STR-S6708 POWER CONTROL
GND B C D IN D OUT
FB601 1.1
D607 EG1Z
C607 220 25V
C608 1500p 2kV E
R606 JW12.5MM
R605 0.27 2W :RS
R607 12 1W :RS
FB607 1.1
CN901 5P
GND 1
SCL 2
SDA 3
DIS 4
NC 5
SERVICE CONNECTOR
CN902 50P
SDA
DIS
SCL
GND
N/S
V-OUT
V.ANGLE
GND
E/W
V+OUT
H DRIVE
V-SYNC
HFBP
GND
EHT
ABL
PROT
12V
GND
9V
33V
STBY 5V
GND
SIRCS
AUDIO L
STBY
GND
5V
AUDIO R
GND
STEREOLED
STBY LED
GND
GND
GND
GND
GND
KEY 2
KEY 1
MUTE
H/P R
GND
H/P L
GND
RIN
LIN
VIN
GND
CIN
YIN
TO A BOARD CN001
R528 1.2M
R529 470k
R517 1.8k
RV301 470k
R518 1.8k
V.ANGLE
-17.5V
+33V
+5V STBY
+12V
+9V
+SAW
EHT
HDRIVE
VPIN
E/W
HFBP
R812 2.2k
R852 18k 1/4W
R833 2.2k :FPRB
R522 22k
R523 22k
Q501 JC501TP-Q SWITCH
C522 10
R524 4.7k
D504 1SS133T
D505 MTZJ-T-77-3.6A
D506 1SS133T
D507 MTZJ-T-77-5.1B
R525 4.7k
C521 10 25V
Q502 JA101-Q SWITCH
C523 0.1
Q503 DTC144ES SWITCH
R526 2.2k
ICS00 STV9379 VERTICAL OUTPUT
V+1/P
VCC
F.B. -PLS
VEE
OUT-PUT
VCC (OUT)
V-1/P
C510 220
C507 2.2 :BP
R500 33k
R505 1.2 :FPRB
C511 0.33 63V
R507 220 2W
D803 GP08D-V.BOOST
R504 56k
R506 470
C504 470p
C506 470 25V
C509 0.1
R508 1.5 2W :RS
C513 0.1mF 100V :MPS
C503 0.1 100V :MPS
R503 10k
R502 2.2k
D502 MTZJ5.6
R519 5MM
R520 33k
C502 470p
R521 39k
R527 15k
-15V
R842 100k
R809 820k
C830 0.1
R843 1M
C802 680pF
R603 5.6k
R801 10k
R805 4.7k
C801 0.01
R637 15k
R802 1SS133
R849 10k
R800 2.2k 1/4W
R602 15k
R804 12k
C800 0.0056 50V :MPS
D817 MTZJ5.6
D801 1SS133
L639 47mH
D800 1SS133
C1207 100 16V
C1214 100 16V
C838 470pF
D807 RGP10G
L802 10mH
R847 330k
R846 100k
C832 0.47mF
R848 220k
PS8010 0.4A
C805 0.15 200V :PT
D808 GP08D
R814 330
C804 0.1
Q801 2SC4793 E/W-OUT
R813 1k 1W
R850 4.7k
Q800 JC501TP-Q BUFFER
CN807 3P .S-MICRO
H.POSITION
RIGHT
CENTRE
LEFT
JW802 10MM
L801 CBL
+21V
-17.5V
+5V
C909 1mF
C906 47
C910 0.01
C908 47
R917 22
R907 75
R916 22
R902 39 1/2W :RC
R901 39 1/2W :RC
D902 MTZJ9.1
D903 MTZJ9.1
D904 MTZJ9.1
D905 MTZJ9.1
D906 MTZJ9.1
IC1201 TDA2822M HEADPHONE AMP
R1204 2.2k
C1209 4.7
C1211 2.2
R1206 8.2k
C1210 2.2
R1205 8.2k
R1203 2.2k
C1208 4.7
C1218 220 16V
R1202 10 :FPRB
D1202 MTZ-J-T-77-2.7B
R1217 47k
Q1204 DTC143TS SWITCH
Q1203 DTC143TS SWITCH
Q1202 DTC114ES SWITCH
IC800 LM393P E/W CONTROL
CN905 3P
KEY1
KEY2
GND
TO H3 BOARD CN908
CN903 13P
GND
L
GND
R
GND
V
GND
C
GND
Y
MUTE SW
HP R
HP L
TO H1 BOARD CN906
CN904 6P
GND
STBY
SIRCS
+5V
RESP
STLED
TO H2 BOARD CN907

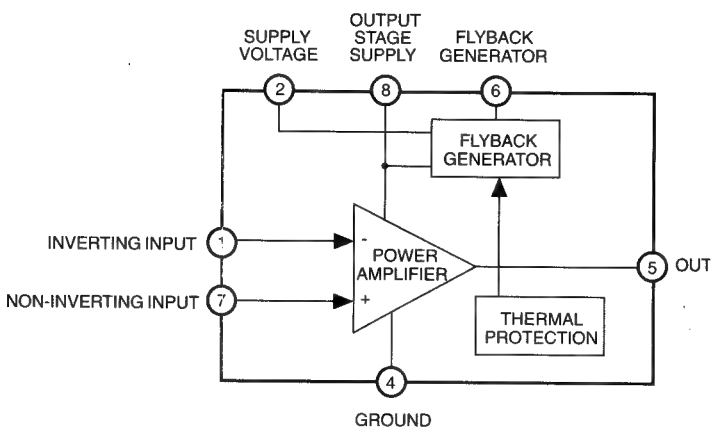

IC601 TLP621GR ISOLATOR
T601 SRT
IC602 SE-135N ERR-AMP
IC600 STR-S6708 POWER CONTROL
GND B D OUT OCP F/B INH VCC
IC605 MC7812 REGULATOR
IC606 LM2940T-9.0 REGULATOR
IC603 5V-REGMC7805CT REGULATOR
IC604 TL750L05CLP REGULATOR
Q601 2SC3852A
Q602 2SA1667 SWITCH
Q603 2SC2808 SWITCH
Q604 2SC2808 SWITCH
Q605 JC501TP-Q SWITCH
Q606 DTA144ES SWITCH
Q607 JC501TP-Q SWITCH
+135V
+12V
+9V
+5V
+5V STBY
-15V
+21V
VSYNC
H.POSITION
RIGHT
CENTRE
LEFT
T803 FBT
T800 PMC
Q803 2SC2688L H-DRIVE
Q805 DTC144ES SWITCH
Q802 2SC4927-01 H-OUT
Q1201 JC501 SWITCH
Q1200 JC501TP-Q SWITCH
IC1200 TDA7264 AUDIO-AMP
ROUT 21V LOUT -21V GND
RY600
SG801
CN804 6P WHT
1 +1000V
2 +200V
3 GND
4 NC
5 H1
6 H2
TO C BOARD CN701
CN1201 3P :S-MICRO
1 +135V
2 NC
3 GND
CN803 1P
1 GND
TAB (CONTACT)
CN801 *
1 H-DRIVE
2 GND
3 GND
4 V-PIN
5 FBT-15V
6 FBT 15V
7 V-DY+
8 V-DY+
9 V-OUT
10 V-OUT
GX TUBE MODELS ONLY
CN800 6P :DY
6 V+
5 V-
4 H-
3 H-
2 H+
1 H+
DY
CN1200 4P :S-MICRO
4 GND
3 L OUT
2 GND
1 R OUT
D618 1SS133T
D500 MTZJ5.1
D807 RGP10G
D808 GP08D
D815 GP08D
D809 RGP02-20EL
D810 RGP10GPKG23
D502 RGP15G-15V
D503 RGP15G-15V
D812 ERC0-15S
D1201 MTZ-J-T-77-3.9B
L802 10mH
L805 4.7mH
JW805
JW807
JW802 10MM
JW808 5MM
T804 HBT
CN807 3P .S-MICRO



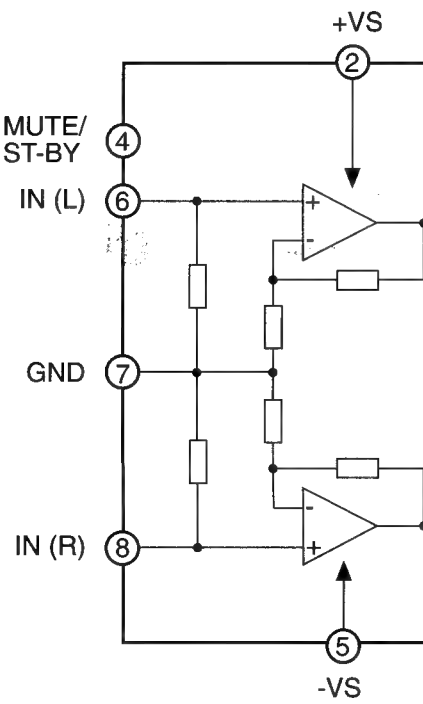
WAVEFORMS D BOARD

① 1.2K Vp-p (H)	② 56.0 Vp-p (V)	③ 11.7 Vp-p (H)	④ 181 Vp-p (
⑤ 3.0 Vp-p (H)	⑥ 56 Vp-p (V)	⑦ 31 Vp-p (V)	⑧ 140 Vp-p (
⑨ 3.9 Vp-p (H)	⑩ 1.6 Vp-p (H)	⑪ 22 Vp-p (H)	⑫ 3.5 Vp-p (
⑬ 5.5 Vp-p (V)			

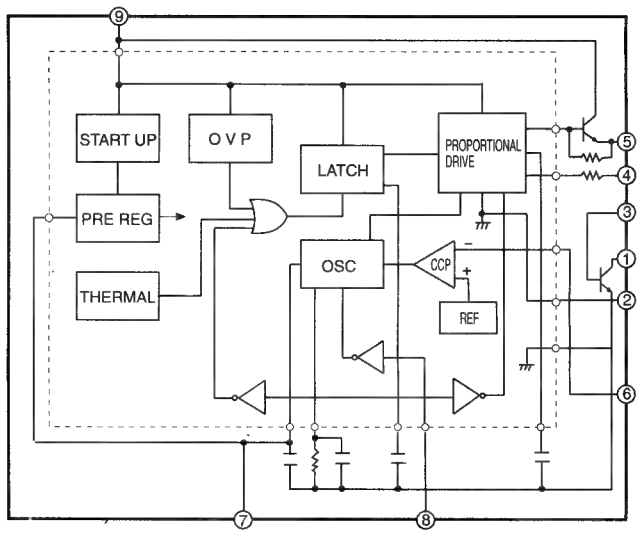
D BOARD IC500 STV9379



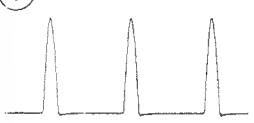
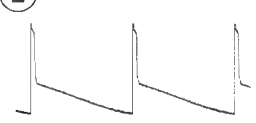
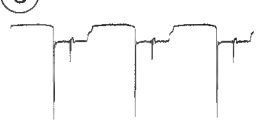
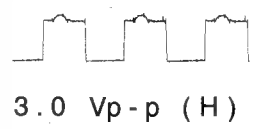
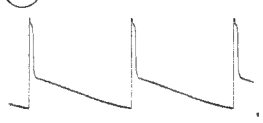
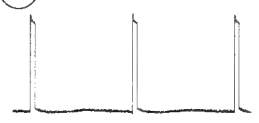
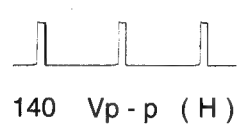
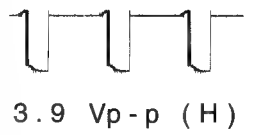
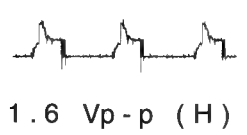
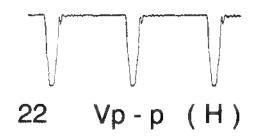
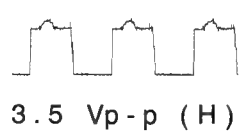
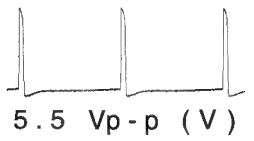
D BOARD IC1200 TDA7



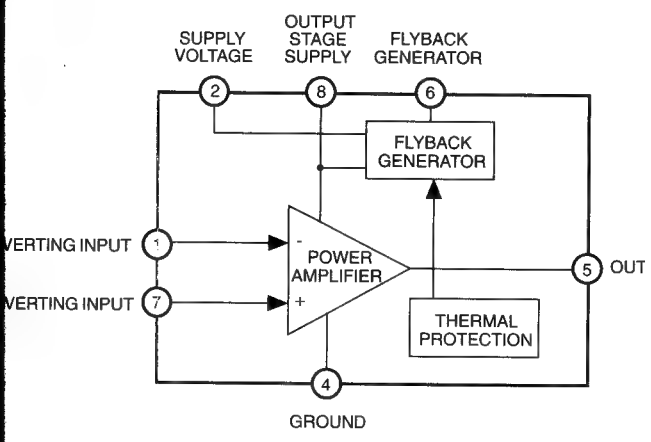
D BOARD IC600 STR-S6708



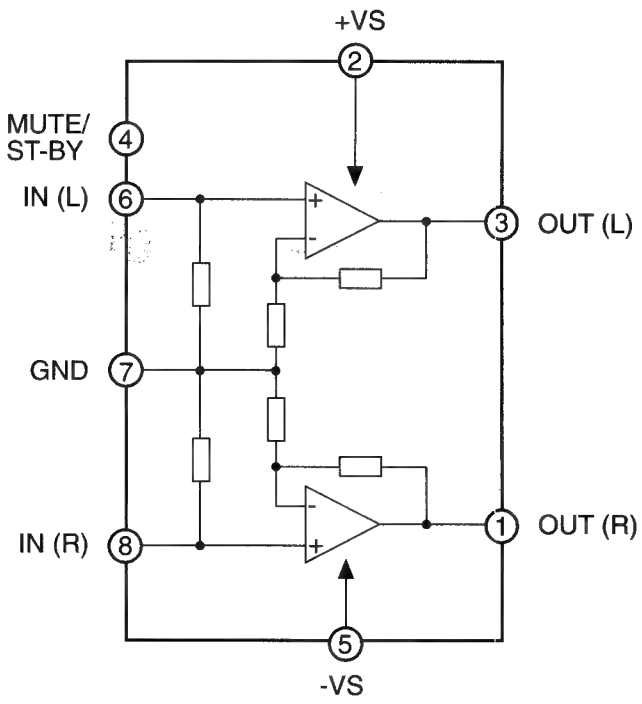
WAVEFORMS D BOARD

①  1.2K Vp-p (H)	②  56.0 Vp-p (V)	③  11.7 Vp-p (H)	④  181 Vp-p (H)
⑤  3.0 Vp-p (H)	⑥  56 Vp-p (V)	⑦  31 Vp-p (V)	⑧  140 Vp-p (H)
⑨  3.9 Vp-p (H)	⑩  1.6 Vp-p (H)	⑪  22 Vp-p (H)	⑫  3.5 Vp-p (H)
⑬  5.5 Vp-p (V)			

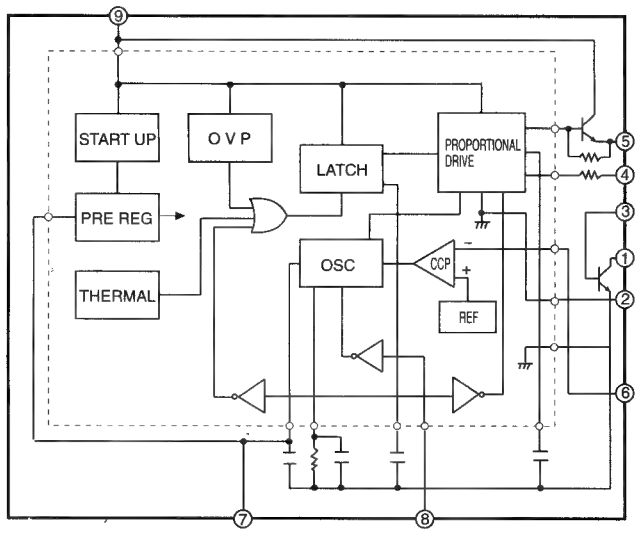
D BOARD IC500 STV9379

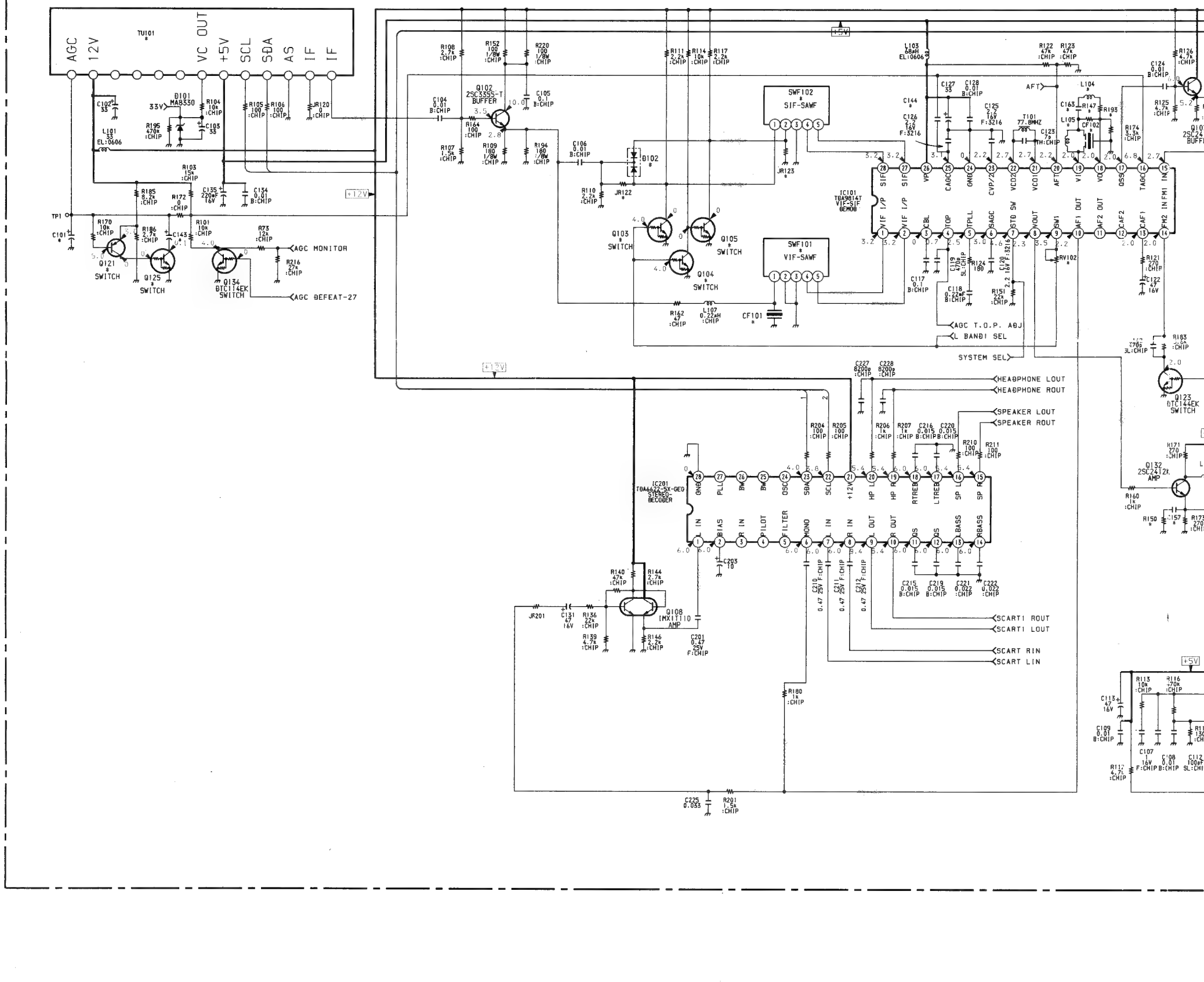


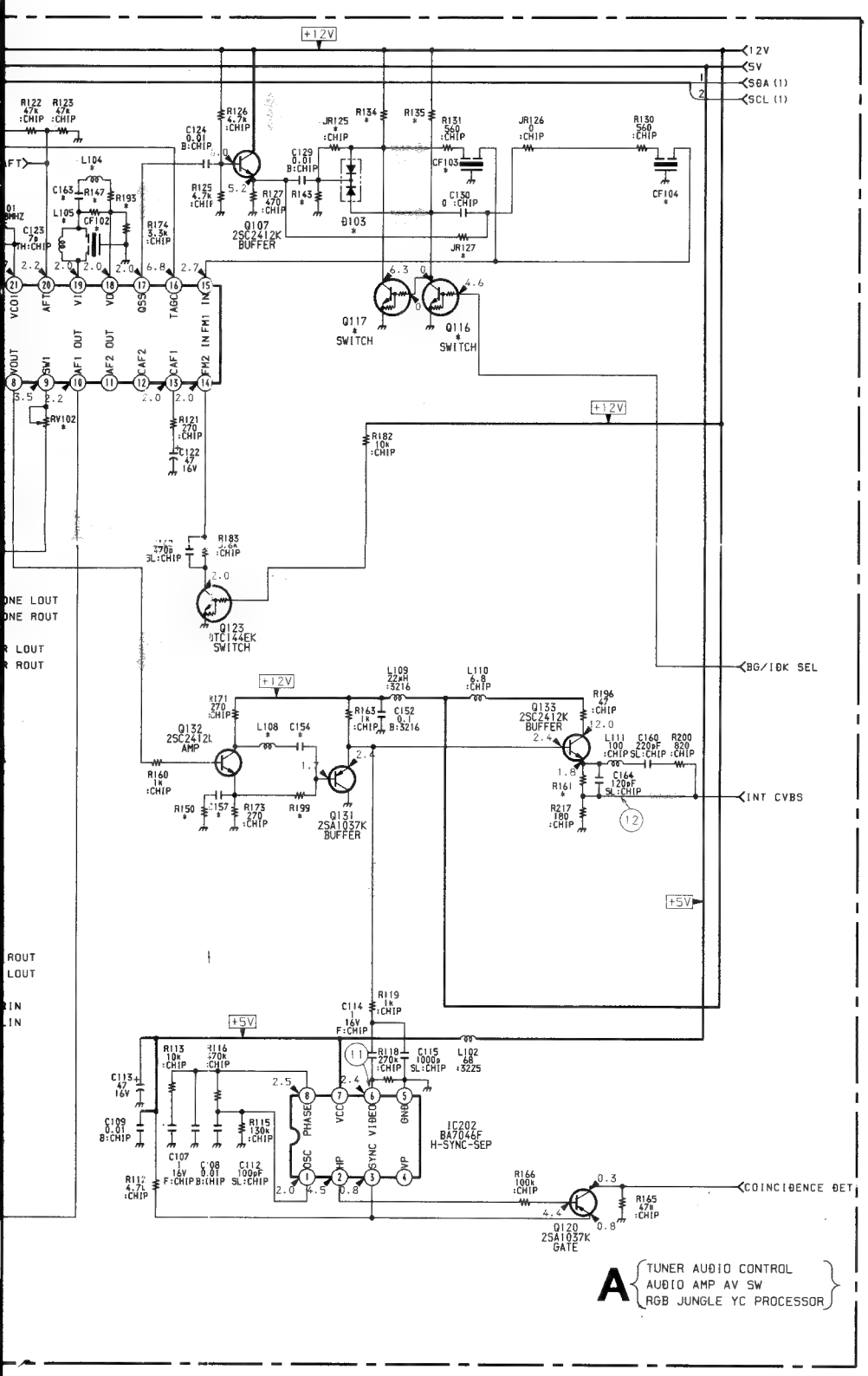
D BOARD IC1200 TDA7264

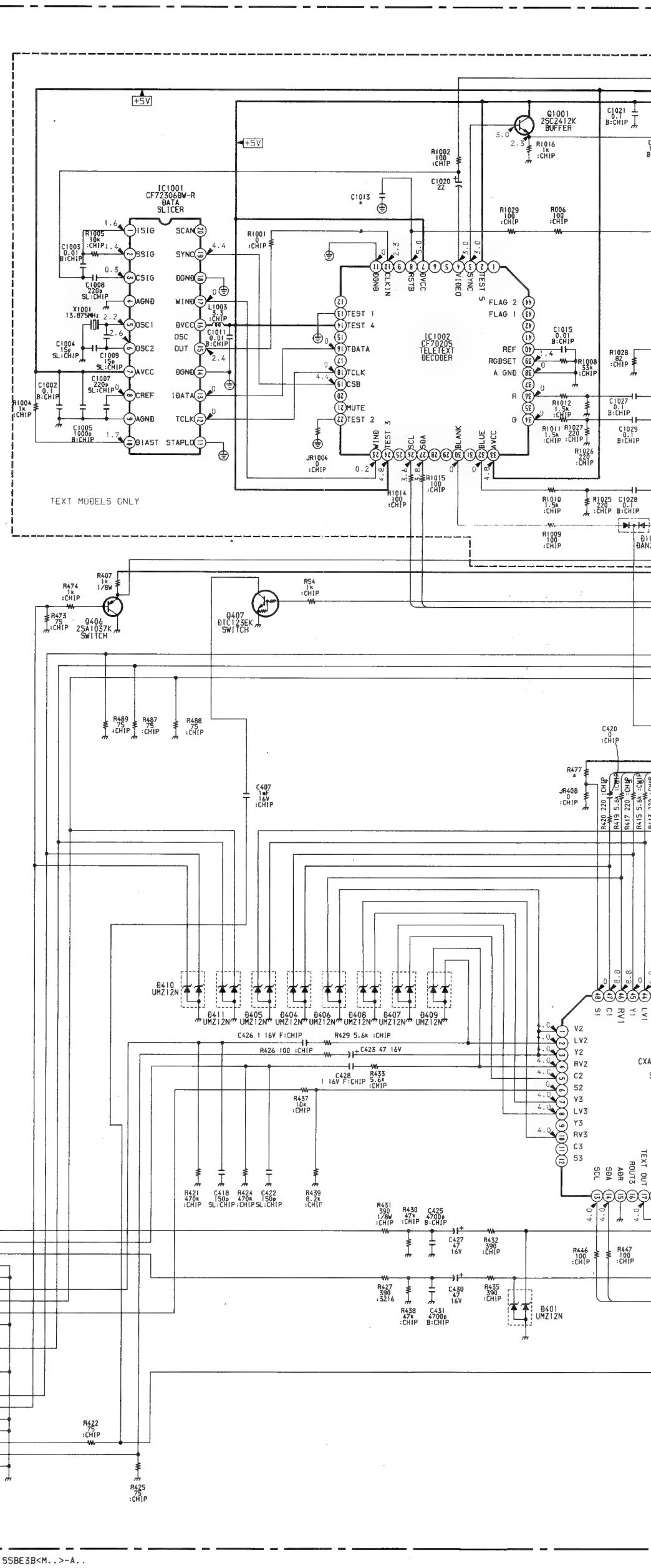


D BOARD IC600 STR-S6708




B-:SSBE3B<M..>-A..
TU101
AGC
12V
VC OUT
+5V
SCL
SDA
AS
IF
IF
+12V
+5V
SWF102
SIF-SAWF
SWF101
VIF-SAWF
IC101
TBA9814T
VIF-SIF
DEMOD
SIF I/P
VIF I/P
AGC MONITOR
AGC DEFEAT-27
AGC T.O.P. ADJ
L BAND SEL
SYSTEM SEL
AFT
HEADPHONE LOUT
HEADPHONE ROUT
SPEAKER LOUT
SPEAKER ROUT
SCART1 ROUT
SCART1 LOUT
SCART RIN
SCART LIN
IC201
T0A6622-5X-GEG
STEREO-
DECODER
Q102
2SC3355-T
BUFFER
Q103
SWITCH
Q104
SWITCH
Q105
SWITCH
Q108
IMX1T110
AMP
Q121
SWITCH
Q125
SWITCH
Q134
DTC114EK
SWITCH
Q123
DTC144EK
SWITCH
Q132
2SC2412K
AMP
T101
77.8MHZ
CF101
CF102
JR120
JR122
JR123
JR201
RV102
TP1

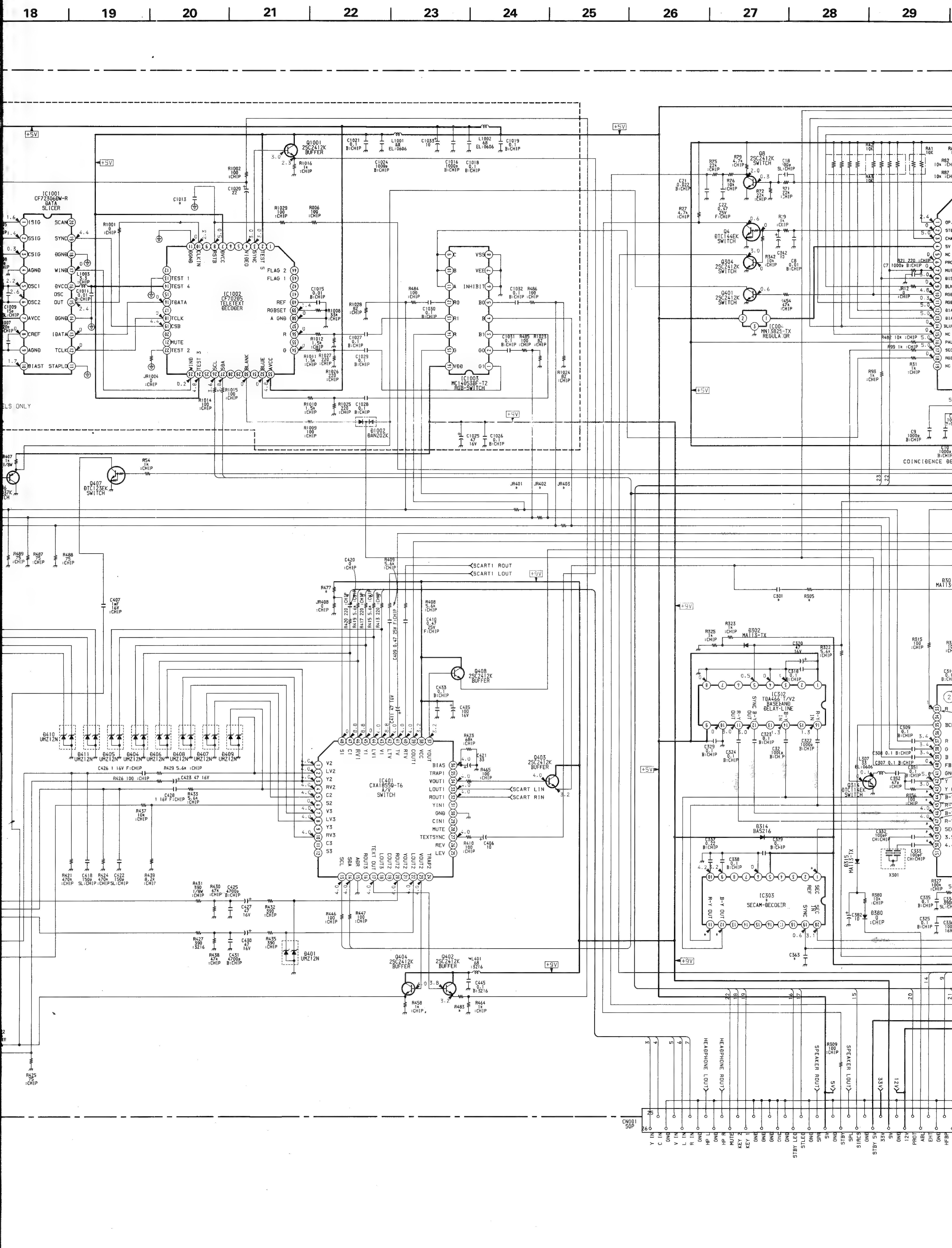


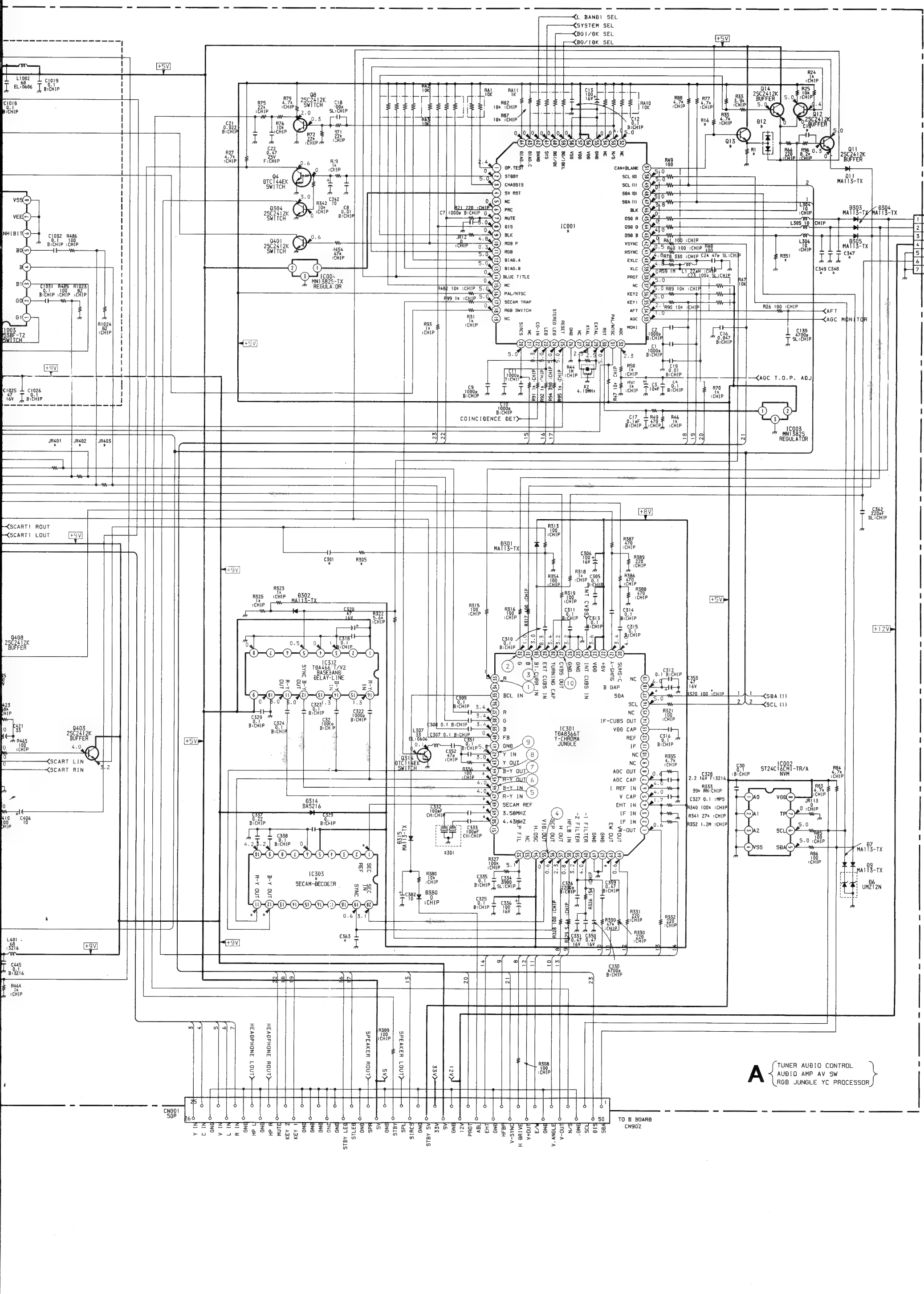


Voltages indicated with the mark ※ on the schematic diagram are shown in the table below.

A BOARD

IC	Pin	PAL	SECAM	NTSC 3.58	NTSC 4.43
IC301	17	4.0	4.0	4.0	0
	35	3.6	2.5	3.5	3.5
	44	1.5	3.1	1.5	1.5
	45	1.5	3.0	1.5	1.5
	48	1.7	4.4	1.6	1.7
	49	1.4	1.4	2.0	1.4
	50	2.0	2.0	1.4	2.0
	63	3.4	2.5	2.2	2.5
IC303	1	1.7	4.4	1.6	1.7
	11	1.5	3.0	1.5	1.5
	12	1.5	3.1	1.5	1.5

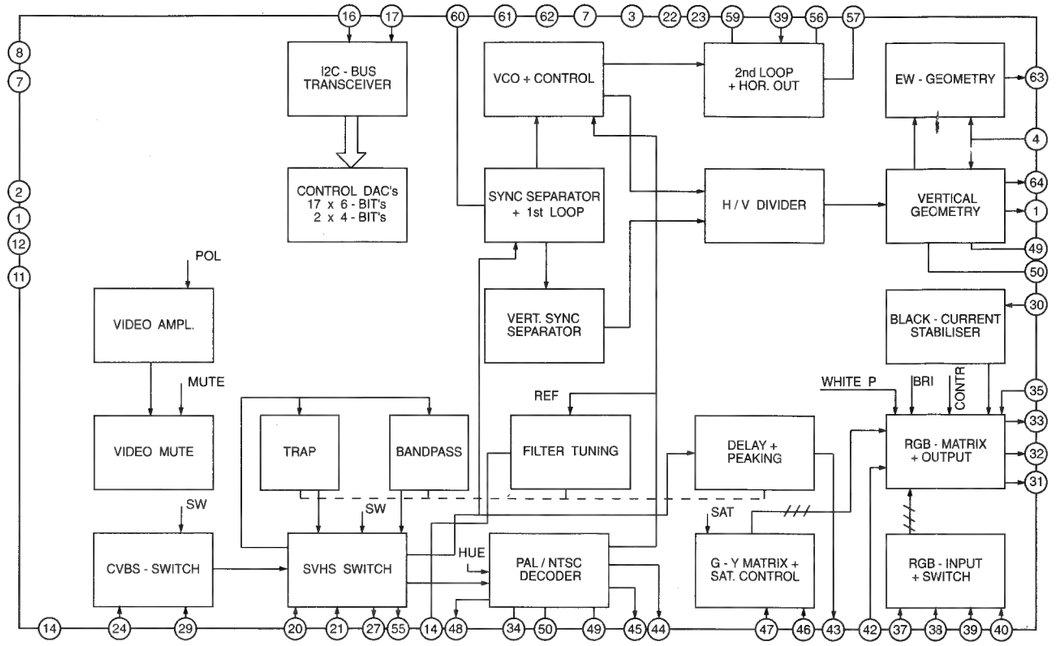

18 19 20 21 22 23 24 25 26 27 28 29
IC1001 CF72306DW-R DATA SLICER
ISIG SSIG CSIG AGND OSC1 OSC2 AVCC CREF AGND BIAST STAPLO TCLK IDATA DGND OUT OSC DVCC WIND DGND SYNC SCAN
IC1002 CF70205 TELETEXT DECODER
DGND CLKIN RSTB DVCC VIDEO SYNC TEST 5 FLAG 2 FLAG 1 REF RGBSET A GND R G TEST 1 TEST 4 TDATA TCLK CSB MUTE TEST 2 WIND TEST 3 SCL SDA BLANK BLUE AVCC
Q1001 2SC2412K BUFFER
IC1003 MC14053BF-T2 RGB-SWITCH
C B A INHIBIT R0 R1 R G VDD VSS VEE B0 B B1 G0 G1
D1002 DAN202K
Q407 DTC123EK SWITCH
ELS ONLY
Q8 2SC2412K SWITCH
Q4 DTC144EK SWITCH
Q304 2SC2412K SWITCH
Q401 2SC2412K SWITCH
IC004 MN1382S-TX REGULATOR
COINCIDENCE DE
IC401 CXA1855Q-T6 A/V SWITCH
V2 LV2 Y2 RV2 C2 S2 V3 LV3 Y3 RV3 C3 S3 SCL SDA ADR ROUT3 TEXT OUT LOUT3 COUT2 ROUT2 YOUT2 LOUT2 VOUT2 TRAP2 LEV REV TEXTSYNC MUTE CIN1 GND YIN1 ROUT1 LOUT1 VOUT1 TRAP1 BIAS YOUT VCC COUT1 RTV TV LTV V1 LV1 Y1 RV1 C1 S1
SCART1 ROUT
SCART1 LOUT
SCART LIN
SCART RIN
Q408 2SC2412K BUFFER
Q403 2SC2412K BUFFER
Q404 2SC2412K BUFFER
Q402 2SC2412K BUFFER
D410 UMZ12N D411 UMZ12N D405 UMZ12N D404 UMZ12N D406 UMZ12N D408 UMZ12N D407 UMZ12N D409 UMZ12N D401 UMZ12N
IC302 TDA4661T/V2 BASEBAND DELAY-LINE
IC303 * SECAM-DECODER
D302 MA113-TX
D314 BAS216
D315 MA113-TX
Q314 DTC114EK SWITCH
X301
HEADPHONE LOUT
HEADPHONE ROUT
SPEAKER ROUT
SPEAKER LOUT
CN001 50P
Y IN C IN GND V IN L IN R IN GND HP L GND HP R MUTE KEY 2 KEY 1 GND GND GND CNC GND STBY LED STLED GND SPR 5V GND STBY SPL SIRCS GND STBY 5V 33V 9V GND 12V PROT ABL EHT GND HFBP
+5V +9V


L BAND1 SEL
SYSTEM SEL
BG1/0K SEL
BG/10K SEL
+5V
+8V
+9V
+12V
IC001
IC002 ST24C16CMT-TR/A NVM
IC003 MN13825 REGULATOR
IC004 MN1382S-TX REGULATOR
IC301 T0A8366T Y-CHROMA JUNGLE
IC302 T0A466 T/V2 BASEBAND DELAY-LINE
IC303 SECAM-DECODER
Q4 DTC144EK SWITCH
Q8 2SC2412K SWITCH
Q304 2SC2412K SWITCH
Q401 2SC2412K SWITCH
Q403 2SC2412K BUFFER
Q408 2SC2412K BUFFER
Q11 2SC2412K BUFFER
Q12 2SC2412K BUFFER
Q13
Q14 2SC2412K BUFFER
Q314 DTC114EK SWITCH
D11 MA113-TX
D301 MA113-TX
D302 MA113-TX
D303 MA113-TX
D304 MA113-TX
D305 MA113-TX
D314 BAS216
D380 0
D7 MA113-TX
D9 MA113-TX
D6 UMZ12N
X2 4.19MHz
X301
CN002 7P WHT
1 R
2 G
3 B
4 +12V
5 GND
6 CUT OFF
7 GND
TO C BOARD CN703
CN001 50P
TO ■ BOARD CN902
SCART1 ROUT
SCART1 LOUT
SCART LIN
SCART RIN
AFT
AGC MONITOR
AGC T.O.P. ADJ
COINCIDENCE DET
SBA (1)
SCL (1)
CAN+BLANK
OP. TEST
STDBY
CHASSIS
5V RST
PRC
MUTE
BIS
BLK
RGB P
RGB
BIAG.A
BIAG.B
BLUE TITLE
PAL/NTSC
SECAM TRAP
RGB SWITCH
HEADPHONE LOUT
HEADPHONE ROUT
SPEAKER ROUT
SPEAKER LOUT
TUNER AUDIO CONTROL
AUDIO AMP AV SW
RGB JUNGLE YC PROCESSOR

A BOARD * MARK

Model	M2541A	M2540B	M2540D	M2541D	M2540E	M2541E	M2540K	M2541K	M2541L	M2541U
C15	33PF	33PF	33PF	33PF	-	-	-	-	33PF	33PF
C101	22UF	4.7UF	22UF	22UF	22UF	22UF	22UF	22UF	22UF	22UF
C143	-	100UF	-	-	-	-	-	-	-	-
C144	-	1UF	-	-	-	-	-	-	-	-
C154	180PF	33PF	180PF	180PF	180PF	180PF	180PF	180PF	47PF	47PF
C157	68PF	68PF	68PF	120PF	68PF	68PF	68PF	68PF	100PF	100PF
C163	-	1000PF	-	-	-	-	-	-	-	-
C301	-	-	-	-	-	-	-	-	470PF	470PF
C347	68PF	68PF	68PF	68PF	10PF	10PF	10PF	10PF	68PF	68PF
C348	68PF	68PF	68PF	68PF	10PF	10PF	10PF	10PF	68PF	68PF
C349	68PF	68PF	68PF	68PF	10PF	10PF	10PF	10PF	68PF	68PF
C355	47PF	47PF	47PF	47PF	47PF	47PF	47PF	47PF	68PF	68PF
C363	22PF	22PF	22PF	22PF	22PF	22PF	22PF	22PF	-	-
C1013	1MF	-	-	1MF	-	-	-	-	1MF	1MF
CF101	-	EFCV4045A4	EFCV4045A4	EFCV4045A4	EFCV4045A4	EFCV4045A4	EFCV4045A4	EFCV4045A4	-	-
CF102	5.5MHZ	6.5MHZ	5.5MHZ	5.5MHZ	5.5MHZ	5.5MHZ	5.5MHZ	5.5MHZ	6.0MHZ	6.0MHZ
CF103	5.5MHZ	5.5MHZ	5.5MHZ	5.5MHZ	5.5MHZ	5.5MHZ	5.5MHZ	5.5MHZ	-	-
CF104	-	6.0MHZ	6.5MHZ	6.5MHZ	-	-	6.5MHZ	6.5MHZ	6.0MHZ	6.0MHZ
CF109	TRAP	TRAP	TRAP	TRAP	-	-	-	-	-	-
D12	-	MA715-TX	-	-	-	MA715-TX	-	-	-	-
D102	-	DAN202K	-	-	-	-	-	-	-	-
D103	-	DAN202K	DAN202K	DAN202K	-	-	DAN202K	DAN202K	-	-
IC001	CXP85228-113Q	CXP85228-112Q	CXP85228-112Q	CXP85228-112Q	CXP85228-113Q	CXP85228-113Q	CXP85228-112Q	CXP85228-112Q	CXP85228-113Q	CXP85228-113Q
IC303	-	TDA8395T	TDA8395T	TDA8395T	-	-	TDA8395T	TDA8395T	-	-
JR122	0	-	0	0	0	0	0	0	0	0
JR123	0	-	0	0	0	0	0	0	0	0
JR125	0	-	-	-	0	0	-	-	-	-
JR127	-	-	-	-	-	-	-	-	0	0
JR401	-	0	0	-	0	-	0	-	-	-
JR402	-	0	0	-	0	-	0	-	-	-
JR403	-	0	0	-	0	-	0	-	-	-
L104	-	100UH	-	-	-	-	-	-	-	-
L105	15UH	5.6UH	15UH	15UH	15UH	15UH	15UH	15UH	15UH	15UH
L108	10UH	27UH	10UH	10UH	10UH	10UH	10UH	10UH	10UH	10UH
Q13	-	2SC2412K	-	-	-	2SC2412K	-	-	-	-
Q103	-	DTC114EK	-	-	-	-	-	-	-	-
Q104	-	DTC114EK	-	-	-	-	-	-	-	-
Q105	-	DTC114EK	-	-	-	-	-	-	-	-
Q116	-	DTC144EK	DTC144EK	DTC144EK	-	-	DTC144EK	DTC144EK	-	-
Q117	-	DTC144EK	DTC144EK	DTC144EK	-	-	DTC144EK	DTC144EK	-	-
Q121	-	2SA1162-G	-	-	-	-	-	-	-	-
Q125	-	DTC114EK	-	-	-	-	-	-	-	-
R1	-	1K	-	-	-	-	-	-	-	-
R16	-	1K	-	-	-	-	-	-	-	-
R134	-	2.2K	2.2K	2.2K	-	-	2.2K	2.2K	-	-
R135	-	2.2K	2.2K	2.2K	-	-	2.2K	2.2K	-	-
R143	-	2.2K	2.2K	2.2K	-	-	2.2K	2.2K	-	-
R147	220	180	220	220	220	220	220	220	330	330
R150	0	0	0	0	0	0	0	0	1.5K	1.5K
R161	180	180	180	180	180	180	180	180	820	820
R193	-	1K	-	-	-	-	-	-	-	-
R199	330	1.2K	330	330	330	330	330	330	1K	1K
R305	-	-	-	-	-	-	-	-	1K	1K
R351	6.8K	6.8K	6.8K	6.8K	-	-	-	-	6.8K	6.8K
R365	100	100	100	100	100	100	100	100	120	120
R477	-	-	-	-	-	-	-	-	5.6K	5.6K
R483	1.2K	1.2K	1.2K	1.2K	1.2K	1.2K	1.2K	1.2K	820	820
RV102	-	22K	-	-	-	-	-	-	-	-
SWF101	K3953M	K3953M	K3953M	K3953M	K3953M	K3953M	K3953M	K3953M	K3953M	J3950M
SWF102	K9350M	K9453M	K9350M	K9350M	K9350M	K9350M	K9350M	K9350M	K9350M	K9350M
TU101	UV-916H	UV-916H	UV-916H	UV-916H	UV-916H	UV-916H	UV-916H	UV-916H	UV-916H	U-944C

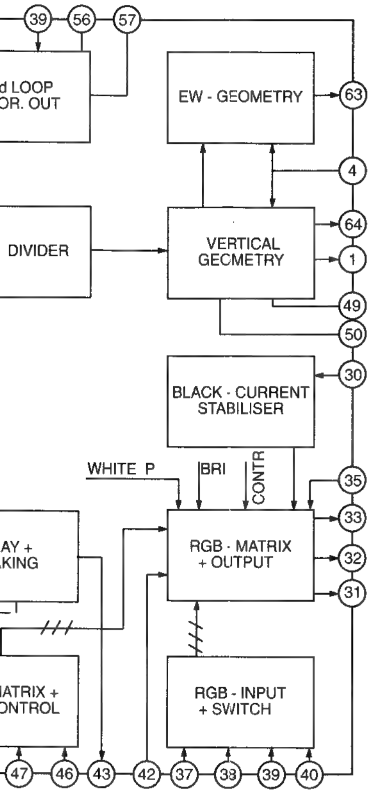
A BOARD IC301 TDA8366T

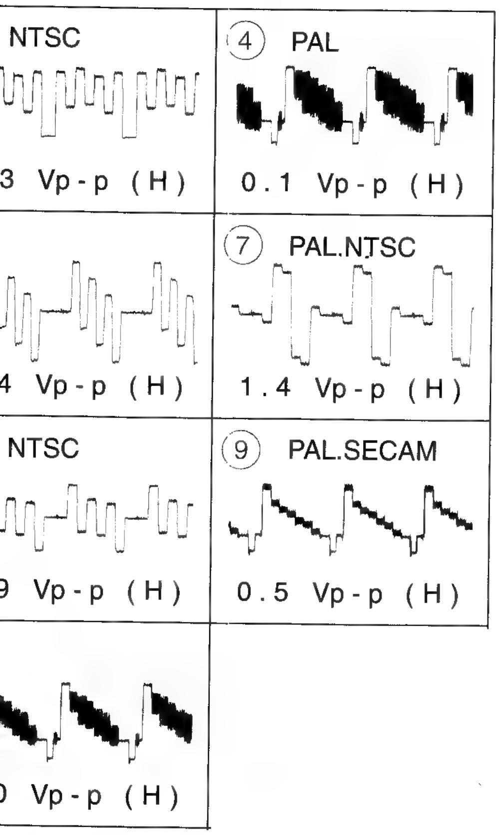


WAVEFORMS A BOARD

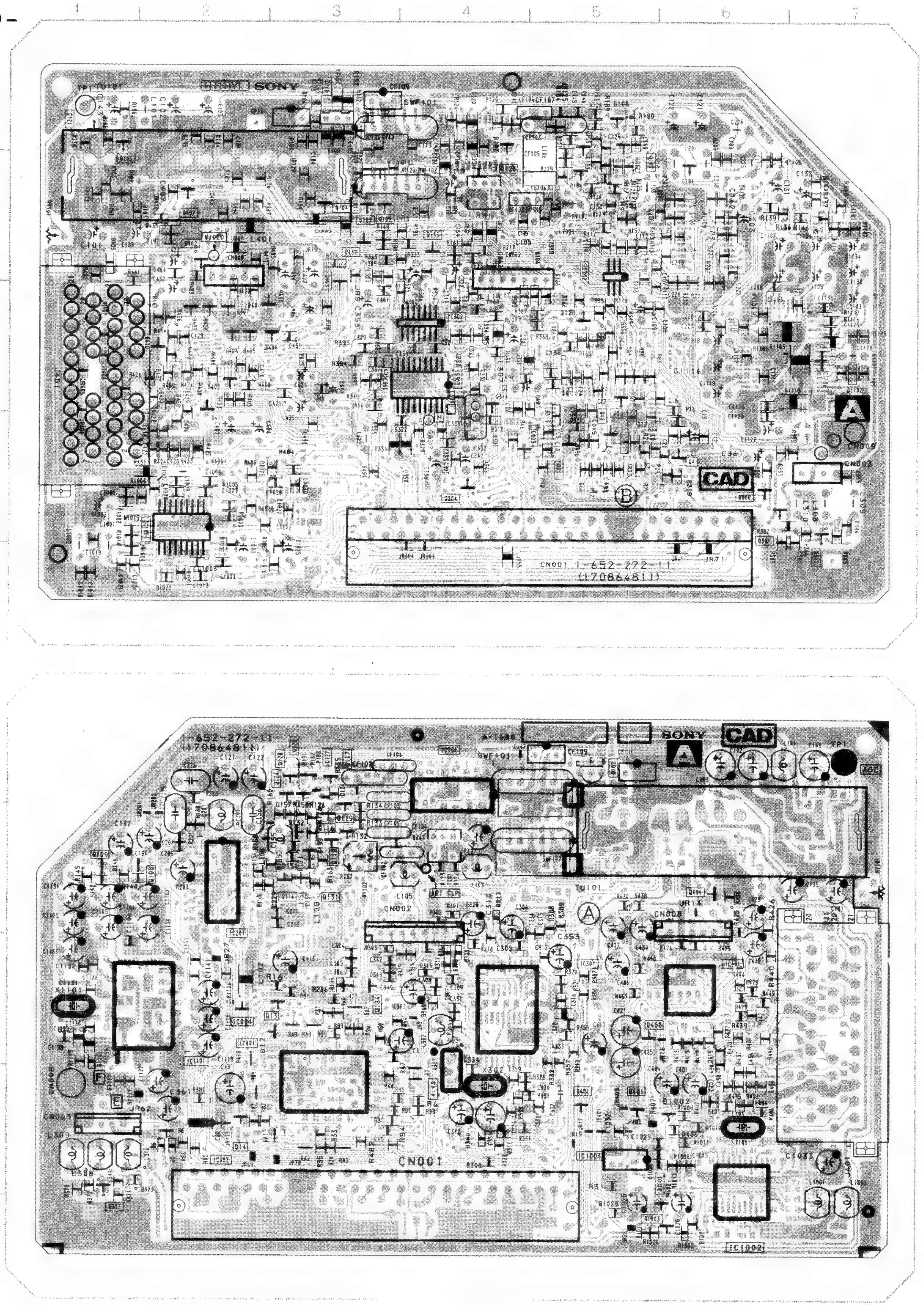
① 3.5 Vp-p (H)	② 3.0 Vp-p (H)	③ PAL,SECAM 2.5 Vp-p (H)	③ NTSC 2.3 Vp-p (H)	④ PAL 0.1 Vp-p
④ SECAM 1.1 Vp-p (H)	④ NTSC 0.9 Vp-p (H)	⑤ 1.0 Vp-p (H)	⑥ 1.4 Vp-p (H)	⑦ PAL.NTS 1.4 Vp-p
⑦ SECAM 1.1 Vp-p (H)	⑧ PAL 0.8 Vp-p (H)	⑧ SECAM 1.5 Vp-p (H)	⑧ NTSC 0.9 Vp-p (H)	⑨ PAL.SEC 0.5 Vp-p
⑨ NTSC 0.4 Vp-p (H)	⑩ 1.0 Vp-p (H)	⑪ 1.6 Vp-p (H)	⑫ 1.0 Vp-p (H)	

A TUNER AUDIO CONTROL
AUDIO AMP AV SW
RGB JUNGLE YC PROCESSOR





– A BOARD –

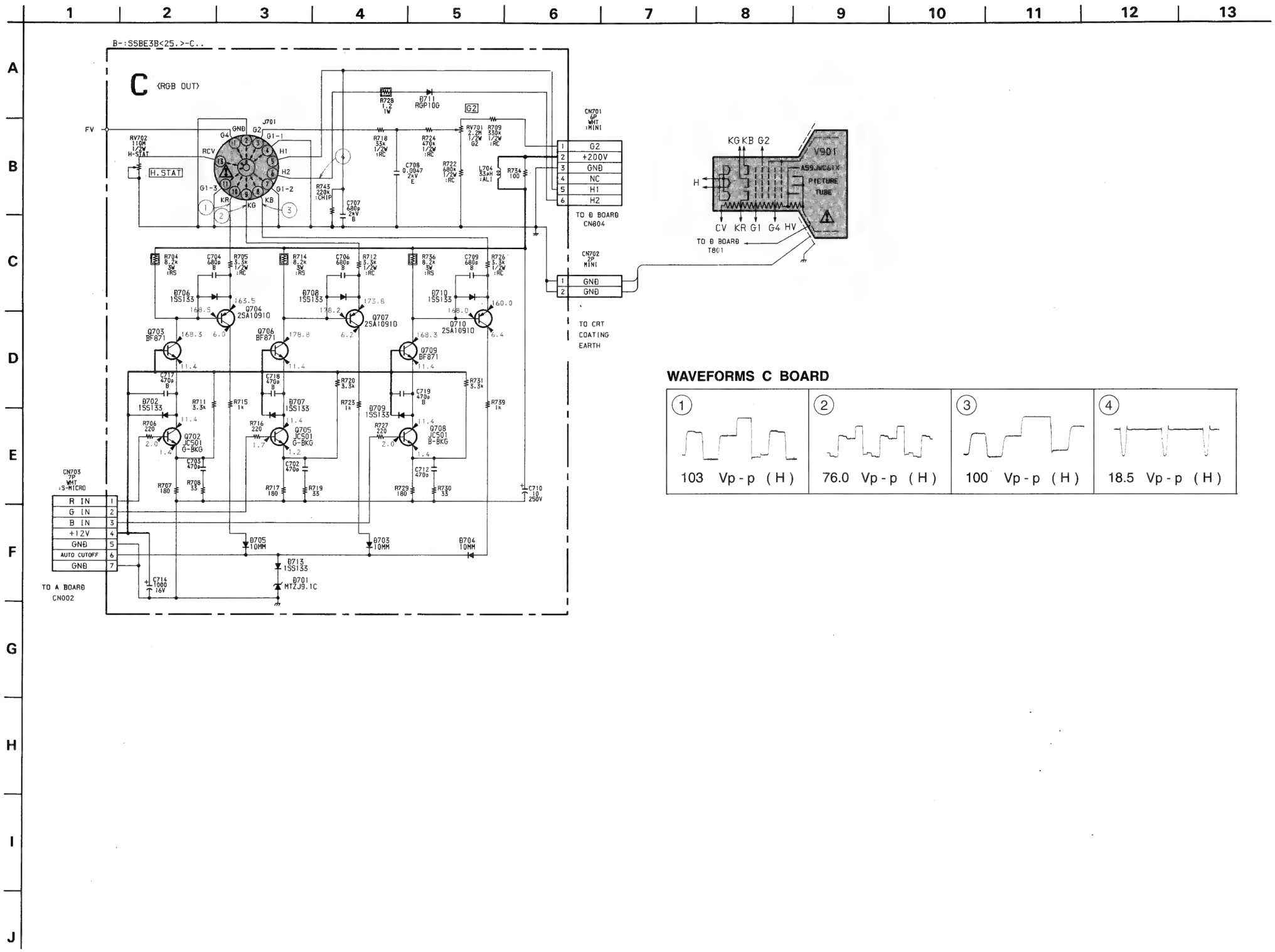


IC	
IC001	H - 2
IC002	I - 2
IC101	F - 4
IC201	G - 2
IC202	B - 5
IC301	H - 5
IC302	C - 4
IC303	C - 4
IC401	H - 6
IC1001	D - 2
IC1002	J - 6
IC1003	I - 5
IC1101	H - 2

TRANSISTOR	
Q4	D - 6
Q8	C - 5
Q11	D - 5
Q12	C - 5
Q14	I - 2
Q102	F - 5, A - 3
Q103	B - 3
Q104	B - 3
Q105	B - 3
Q107	B - 5
Q108	G - 2
Q109	G - 1
Q114	G - 3
Q116	G - 3
Q117	F - 3
Q120	C - 5
Q121	A - 1
Q123	B - 4
Q124	F - 3
Q125	B - 1
Q130	B - 3
Q131	G - 3
Q132	G - 3
Q133	B - 4
Q304	D - 4
Q312	E - 7
Q313	J - 1
Q314	C - 4
Q380	D - 6
Q381	D - 6
Q401	I - 5
Q402	B - 2
Q403	B - 3
Q404	G - 6
Q1001	I - 6
Q1003	J - 5

DIODE	
D6	I - 2
D7	I - 2
D9	I - 2
D11	D - 5
D101	B - 2
D102	B - 4
D103	A - 5
D201	B - 6
D301	G - 4
D302	C - 4
D303	H - 3
D304	B - 5
D305	C - 4
D314	B - 3
D380	I - 4
D401	C - 2
D402	C - 2
D404	C - 2
D405	C - 2
D406	C - 2
D407	C - 2
D408	C - 2
D409	C - 2
D410	C - 2
D411	D - 2
D1002	I - 6
D1003	J - 6
D1101	H - 1
D1102	C - 7

Note :
- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

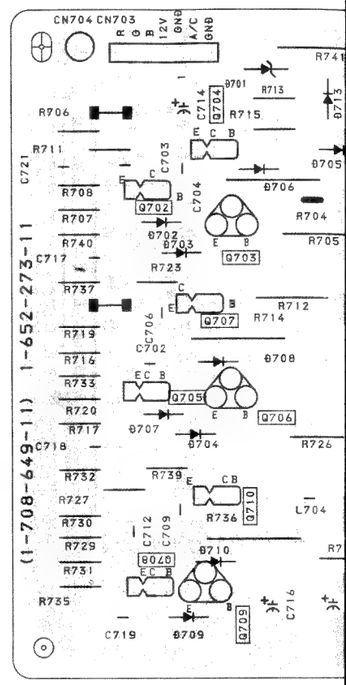


WAVEFORMS C BOARD

①	②	③	④
103 Vp-p (H)	76.0 Vp-p (H)	100 Vp-p (H)	18.5 Vp-p (H)

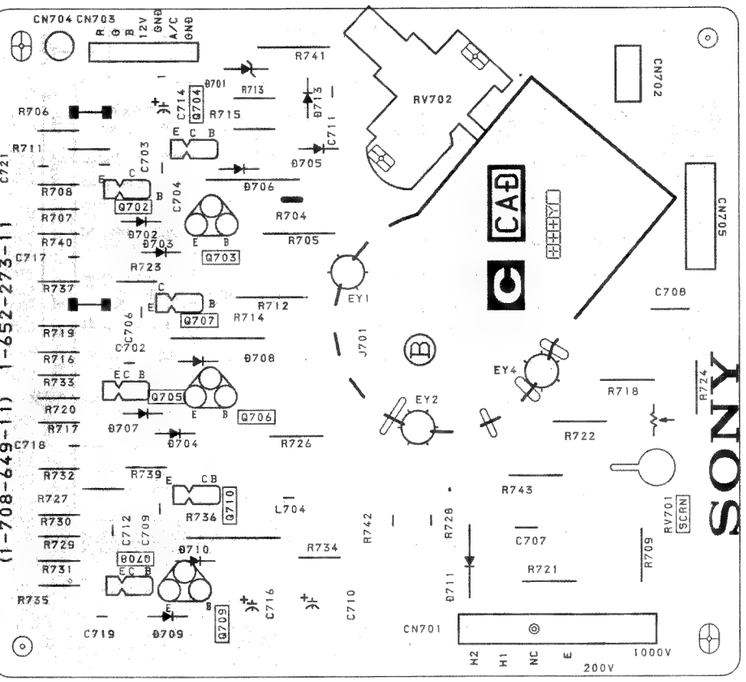
C [RGB OUT]

– C BOARD –



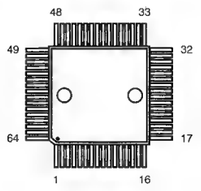
C [RGB OUT]

- C BOARD –

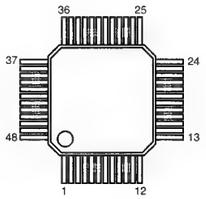


5.4 SEMICONDUCTORS

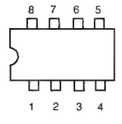
TDA8366
CF70200FN



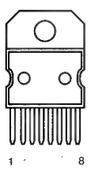
CXA1855Q
SAA7283
CXP85232



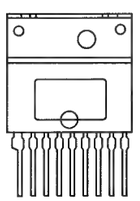
LM393
TDA7264



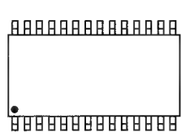
TDA7264



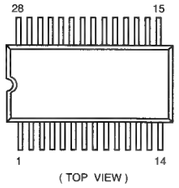
STRS6708



TDA6622

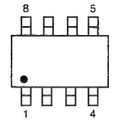


TDA9814

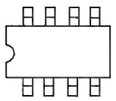


CF72306DW

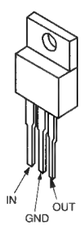
CAT24C16J



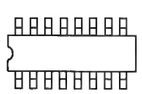
BA7046
TDA2822



MC7812
MC7805CT
LM2940T
SE135N

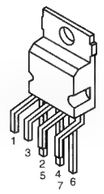


MC14053BF

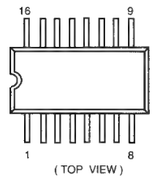


2SA10910
2SC2551-0
JA101
JC501TP

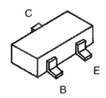
STV9379



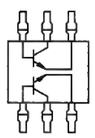
TDA4661/V2



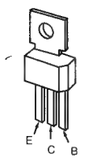
DTC144EK
DTA144EK
2SC2412K
2SA1037-G



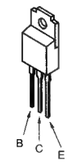
1MX1T110



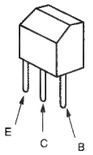
BF871



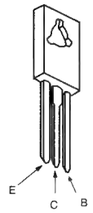
2SA1837
2SC4793



2SD774-34

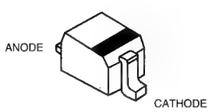


2SC2688-LK

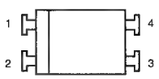


TL750L05CLP

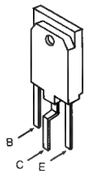
DTZ3.6A



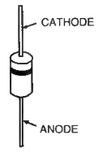
TLP621GR



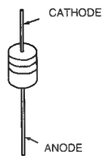
2SC4927-01



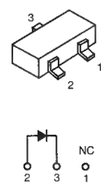
RGP10GPKG23
RGP15GPKG23
GP08DPKG23
RU-4AM
EL1Z
EU-1-V1
EU-1ZV1



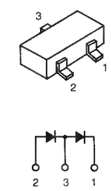
MTZJ-9.1C
MTZJ-5.1B
MTZJ-9.1
MTZJ-3.6A
MTZJ-6.8C
MTZJ-39C
1SS133



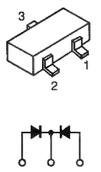
MA704WK



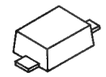
DA204K



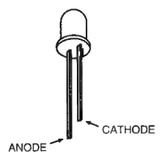
UMZ12N



MA8039
MA113



SLR-54VR3



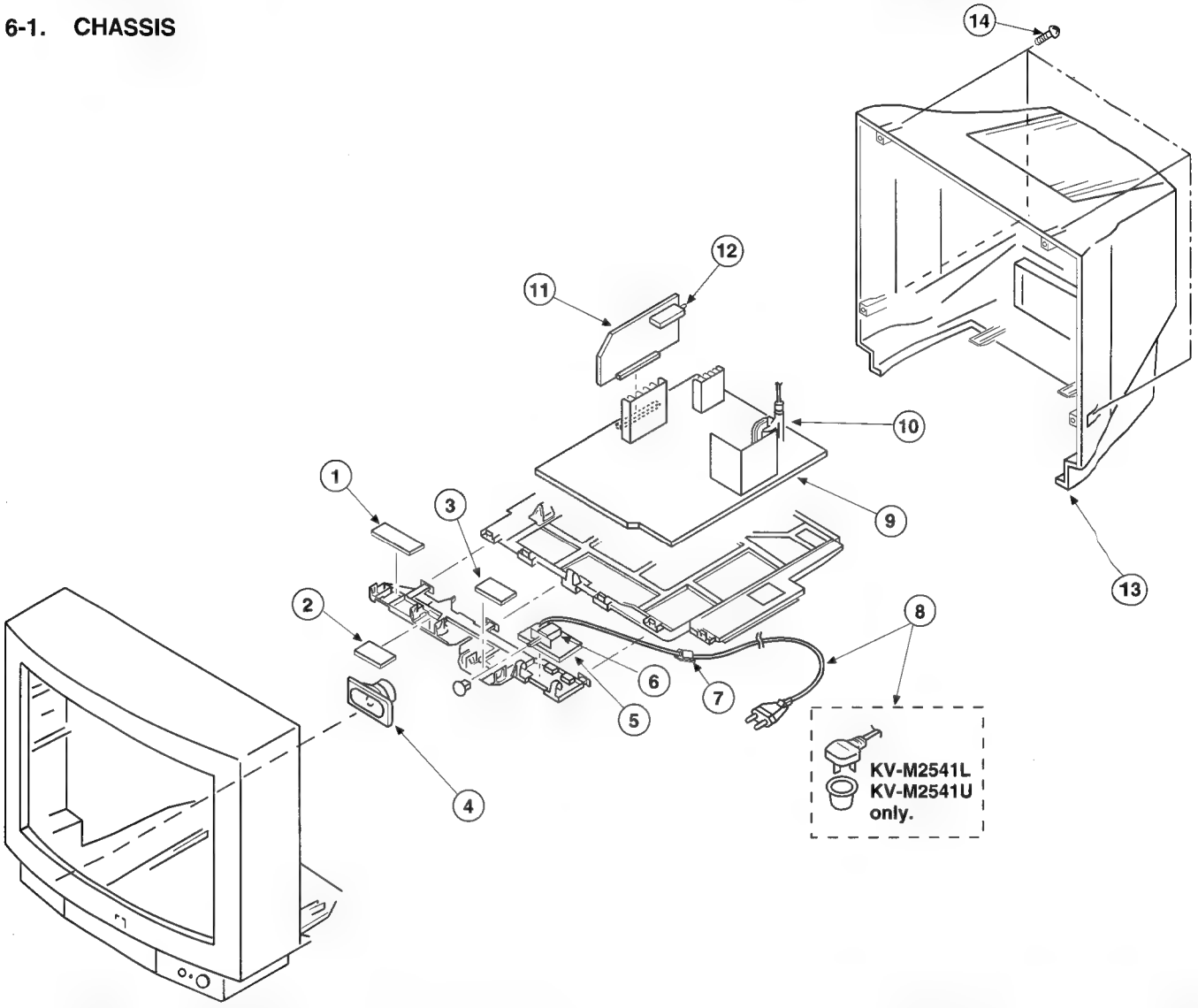
SECTION 6
EXPLODED VIEWS

NOTE :

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

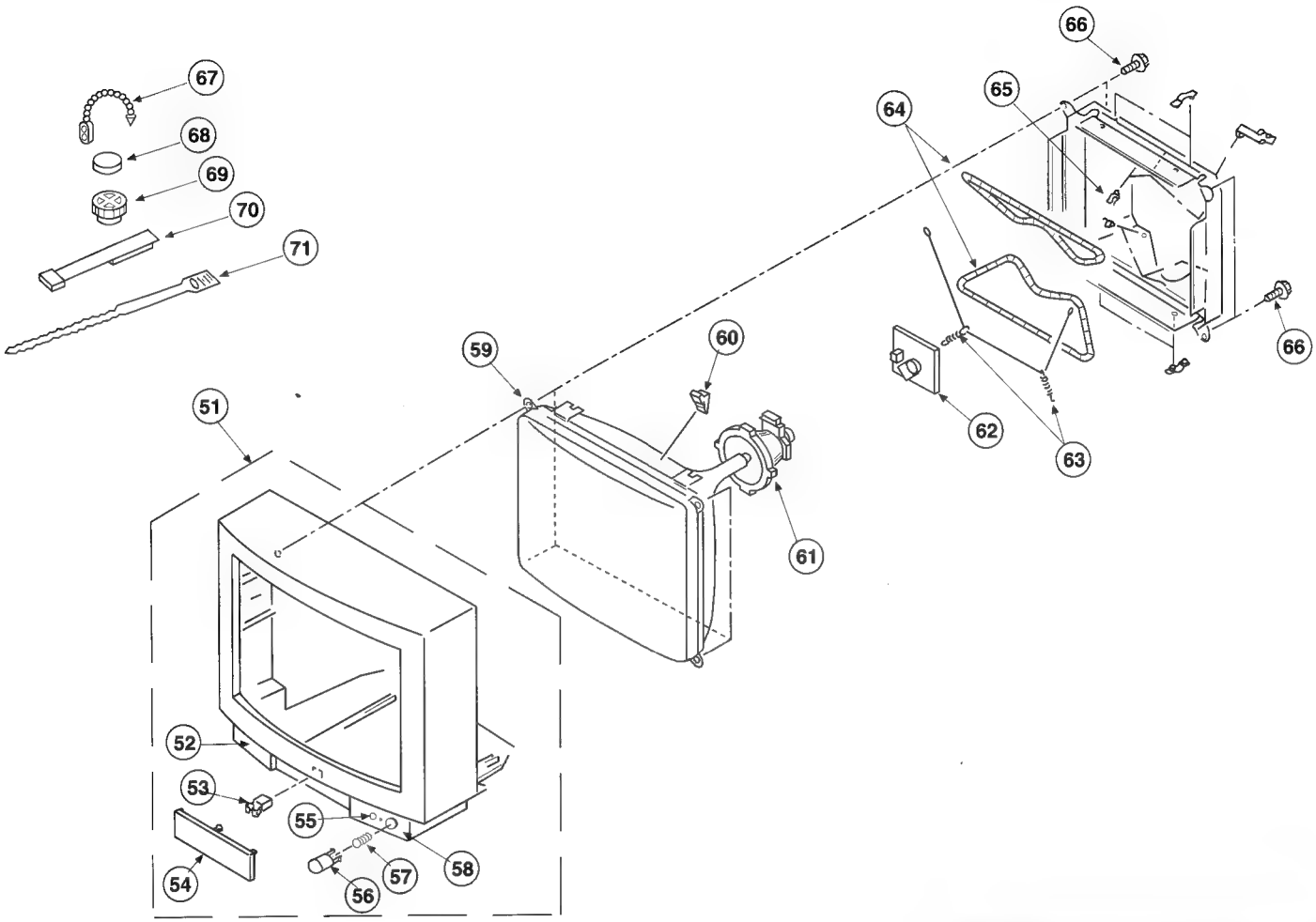
6-1. CHASSIS



REF NO	PART NO	DESCRIPTION	REMARK
1	*1-652-275-11	H1 BOARD	
2	*1-652-270-11	H3 BOARD	
3	*1-652-269-11	H2 BOARD	
4	1-504-698-11	SPEAKER	
5	*1-652-271-11	F1 BOARD	
6	⚠ 1-571-433-11	SWITCH, PUSH (AC POWER)	
7	⚠ 6-309-201-11	HOLDER, AC CORD	
8	⚠ 1-751-680-11	CORD, POWER (WITH NOISE FILTER) (KV-M2541A/M2540D/M2541D)	
	⚠ 1-590-460-11	CORD, POWER (WITH CONNECTOR) (KV-M2540B/M2540E/M2541E/M2540K/M2541K)	
	⚠ 1-590-762-11	CORD, POWER (WITH PLUG) (KV-M2541U/M2541L)	
9	*A-1642-121-A	D BOARD, COMPLETE (KV-M2541A/M2540B/ M2540D/M2541D/M2540E/M2541E/ M2540K/M2541K)	
	*A-1642-134-A	D BOARD, COMPLETE (KV-M2541L/M2541U)	

REF NO	PART NO	DESCRIPTION	REMARK
10	1-453-169-11	FBT ASSY (UX1604A2)	
11	*A-1632-239-A	A BOARD, COMPLETE (KV-M2541A)	
	*A-1632-240-A	A BOARD, COMPLETE (KV-M2540B)	
	*A-1632-236-A	A BOARD, COMPLETE (KV-M2540D)	
	*A-1632-235-A	A BOARD, COMPLETE (KV-M2541D)	
	*A-1632-226-A	A BOARD, COMPLETE (KV-M2540E)	
	*A-1632-202-A	A BOARD, COMPLETE (KV-M2541E)	
	*A-1632-230-A	A BOARD, COMPLETE (KV-M2540K)	
	*A-1632-229-A	A BOARD, COMPLETE (KV-M2541K)	
	*A-1632-241-A	A BOARD, COMPLETE (KV-M2541L)	
	*A-1632-211-A	A BOARD, COMPLETE (KV-M2541U)	
12	1-693-185-11	TUNER (UV916H) (KV-2541A/M2540B/ M2540D/M2541D/2540E/M2541E/ M2541L/M2540K/2541K)	
	1-693-184-11	TUNER (U944C) (KV-M2541U)	
13	4-202-835-01	COVER, REAR	
14	4-039-358-01	SCREW (4x16), (+) BT TAPPING	

6-2. PICTURE TUBE



The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

REF NO		PART NO	DESCRIPTION	REMARK
51		X-4200-172-2	BEZNET ASSY	52-58
52		4-202-833-01	FRAME, SPEAKER	
53		4-392-036-01	CATCHER, PUSH	
54		4-202-831-01	DOOR	
55		4-202-830-01	LID	
56		4-202-834-01	BUTTON, POWER	
57		4-329-112-00	SPRING	
58		4-202-832-21	WINDOW, ORNAMENTAL (KV-M2541A)	
		4-202-832-01	WINDOW, ORNAMENTAL (KV-M2540B/M2540D/M2540E/M2540K)	
		4-202-832-11	WINDOW, ORNAMENTAL (KV-M2541D/M2541E/M2541K/M2541L/M2541U)	
59	⚠	8-733-231-05	CRT SD-178 (A59JWC61X)	
60		3-704-495-01	SPACER, DY	
61	⚠	8-451-311-34	DEFLECTION YOLK (Y25FXA)	

REF NO		PART NO	DESCRIPTION	REMARK
62		*A-1638-052-A	C BOARD, COMPLETE (KV-M2541A/M2540B/M2540D/M2541D/M2540E/M2541E/M2540K/M2541K)	
		*A-1638-045-A	C BOARD, COMPLETE (KV-M2541L/M2541U)	
63		4-303-774-11	SPRING, GROUND WIRE	
64	⚠	1-402-746-11	COIL, DEGAUSSING	
65		4-385-916-01	HOLDER (D)	
66		4-036-188-01	SCREW (M), PT	
67		4-308-870-00	CLIP LEAD WIRE	
68		1-452-032-00	MAGNET, DISK; 10MMØ	
69		1-452-094-00	MAGNET, ROTATABLE DISK; 15MMØ	
70		X-4387-214-1	PERMALLOY ASSY, CORRECTION	
71		3-701-007-00	BAND, BINDING	

ELECTRICAL PARTS LIST

SECTION 7

The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS

- All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

CAPACITORS MF : mF, PF : mmF

COILS MMH : mH, μH : mH

F1 A

REF.NO.	PART NO.	DESCRIPTION	REMARK
	*1-652-271-11	F1 BOARD	
		********	
		< CONNECTOR >	
CN603 ⚠	1-580-844-11	PIN, CONNECTOR (POWER)	
CN604 ⚠	1-695-292-11	PIN, CONNECTOR (POWER)	
		< FUSE >	
F601 ⚠	1-576-232-21	FUSE (M.B.C.) 5A 250V	
⚠	1-533-230-11	HOLDER, FUSE (F601)	
		< SWITCH >	
S601 ⚠	1-571-433-11	SWITCH, PUSH (AC POWER)	
**********			
	*A-1632-239-A	A BOARD, COMPLETE (KV-M2541A)	
		******************	
	*A-1632-240-A	A BOARD, COMPLETE (KV-M2540B)	
		******************	
	*A-1632-236-A	A BOARD, COMPLETE (KV-M2540D)	
		******************	
	*A-1632-235-A	A BOARD, COMPLETE (KV-M2541D)	
		******************	
	*A-1632-226-A	A BOARD, COMPLETE (KV-M2540E)	
		******************	
	*A-1632-202-A	A BOARD, COMPLETE (KV-M2541E)	
		******************	
	*A-1632-230-A	A BOARD, COMPLETE (KV-M2540K)	
		******************	
	*A-1632-229-A	A BOARD, COMPLETE (KV-M2541K)	
		******************	
	*A-1632-241-A	A BOARD, COMPLETE (KV-M2541L)	
		******************	
	*A-1632-211-A	A BOARD, COMPLETE (KV-M2541U)	
		******************	
TP1	1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P	
		< CAPACITOR >	
C1	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C2	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C3	1-124-907-11	ELECT 10MF 20% 50V	
C4	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C7	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C8	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C9	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C10	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C11	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C12	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C13	1-126-101-11	ELECT 100MF 20% 16V	
C15	1-163-105-00	CERAMIC CHIP 33PF 5% 50V (KV-M2541A/M2540B/M2540D/M2541D/M2541L/M2541U)	
C16	1-163-809-11	CERAMIC CHIP 0.047MF 10% 25V	
C17	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C18	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C19	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C21	1-163-037-11	CERAMIC CHIP 0.022MF 10% 25V	
C22	1-164-005-11	CERAMIC CHIP 0.47MF 25V	
C23	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C24	1-163-109-00	CERAMIC CHIP 47PF 5% 50V	
C30	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C101	1-124-916-11	ELECT 22MF 20% 50V (KV-M2541A/M2540D/M2541D/M2540E/M2541E/M2540K/ M2541K/M2541L/M2541U)	
	1-124-927-11	ELECT 4.7MF 20% 50V (KV-M2540B)	
C102	1-124-917-11	ELECT 33MF 20% 50V	
C103	1-124-917-11	ELECT 33MF 20% 50V	
C104	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C105	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C106	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C107	1-164-346-11	CERAMIC CHIP 1MF 16V	
C108	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C109	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C112	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C113	1-124-477-11	ELECT 47MF 20% 16V	
C114	1-164-346-11	CERAMIC CHIP 1MF 16V	
C115	1-163-141-00	CERAMIC CHIP 0.001MF 5% 50V	
C117	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C118	1-164-489-11	CERAMIC CHIP 0.22MF 10% 16V	
C119	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C120	1-164-337-11	CERAMIC CHIP 2.2MF 16V	
C122	1-124-477-11	ELECT 47MF 20% 16V	
C123	1-163-090-00	CERAMIC CHIP 7PF 0.25PF 50V	
C124	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C125	1-164-337-11	CERAMIC CHIP 2.2MF 16V	
C126	1-164-337-11	CERAMIC CHIP 2.2MF 16V	
C127	1-124-917-11	ELECT 33MF 20% 50V	
C128	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C129	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C130	1-216-295-91	METAL GLAZE 0 5% 1/10W	
C131	1-124-477-11	ELECT 47MF 20% 16V	
C134	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	

A

REF.NO.	PART NO.	DESCRIPTION	REMARK
C135	1-126-176-11	ELECT 220MF 20%	10V
C139	1-163-017-00	CERAMIC CHIP 0.0047MF 10%	50V
C142	1-163-133-00	CERAMIC CHIP 470PF 5%	50V
C143	1-126-101-11	ELECT 100MF	16V (KV-M2540B)
C144	1-164-346-11	CERAMIC CHIP 1MF	16V (KV-M2540B)
C152	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C154	1-163-123-00	CERAMIC CHIP 180PF 5% (KV-M2541A/M2540D/M2541D/M2540E/M2541E/M2540K/M2541K)	50V
	1-163-105-00	CERAMIC CHIP 33PF 5%	50V (KV-M2540B)
	1-163-109-00	CERAMIC CHIP 47PF 5%	50V (KV-M2541L/M2541U)
C157	1-163-119-00	CERAMIC CHIP 120PF 5%	50V (KV-M2541D)
	1-163-113-00	CERAMIC CHIP 68PF 5% (KV-M2541A/M2540D/M2540E/M2541E/M2540K/M2541K)	50V
	1-163-117-00	CERAMIC CHIP 100PF 5%	50V (KV-M2541L/M2541U)
C160	1-163-125-00	CERAMIC CHIP 220PF 5%	50V
C163	1-163-141-00	CERAMIC CHIP 0.001MF 5%	50V (KV-M2540B)
C164	1-163-119-00	CERAMIC CHIP 120PF 5%	50V
C201	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C203	1-124-907-11	ELECT 10MF 20%	50V
C210	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C211	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C212	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C215	1-163-023-00	CERAMIC CHIP 0.015MF 10%	50V
C216	1-163-011-11	CERAMIC CHIP 0.0015MF 10%	50V
C219	1-163-023-00	CERAMIC CHIP 0.015MF 10%	50V
C220	1-163-011-11	CERAMIC CHIP 0.0015MF 10%	50V
C221	1-163-037-11	CERAMIC CHIP 0.022MF 10%	25V
C222	1-163-037-11	CERAMIC CHIP 0.022MF 10%	25V
C225	1-130-489-00	FILM 0.033MF 5%	50V
C227	1-163-020-00	CERAMIC CHIP 0.0082MF 10%	50V
C228	1-163-020-00	CERAMIC CHIP 0.0082MF 10%	50V
C301	1-163-113-00	CERAMIC CHIP 470PF 5%	50V (KV-M2541L/M2541U)
C305	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C306	1-126-101-11	ELECT 100MF 20%	16V
C307	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C308	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C309	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C310	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C311	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C312	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C313	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C314	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C315	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C316	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C318	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C320	1-124-477-11	ELECT 47MF 20%	16V
C321	1-163-009-11	CERAMIC CHIP 0.001MF 10%	50V
C322	1-163-009-11	CERAMIC CHIP 0.001MF 10%	50V
C323	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C324	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C325	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C326	1-164-161-11	CERAMIC CHIP 0.0022MF 10%	50V
C327	1-136-165-00	FILM 0.1MF 5%	50V
C328	1-164-337-11	CERAMIC CHIP 2.2MF	16V
C329	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C330	1-163-017-00	CERAMIC CHIP 0.0047MF 10%	50V
C331	1-165-320-11	CERAMIC CHIP 0.47MF 10%	16V
C332	1-163-251-11	CERAMIC CHIP 100PF 5%	50V
C333	1-163-251-11	CERAMIC CHIP 100PF 5%	50V
C334	1-163-016-00	CERAMIC CHIP 0.0039MF 10%	50V
C335	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C336	1-126-101-11	ELECT 100MF 20%	16V
C337	1-164-489-11	CERAMIC CHIP 0.22MF 10%	16V
C338	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C339	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C342	1-124-907-11	ELECT 10MF 20%	50V
C346	1-163-133-00	CERAMIC CHIP 470PF 5%	50V
C347	1-163-113-00	CERAMIC CHIP 68PF 5% (KV-M2541A/M2540B/M2540D/M2541D/M2541L/M2541U)	50V
	1-163-093-00	CERAMIC CHIP 10PF 5% (KV-M2540E/M2541E/M2540K/M2541K)	50V
C348	1-163-113-00	CERAMIC CHIP 68PF 5% (KV-M2541A/M2540B/M2540D/M2541D/M2541L/M2541U)	50V
	1-163-093-00	CERAMIC CHIP 10PF 5% (KV-M2540E/M2541E/M2540K/M2541K)	50V
C349	1-163-113-00	CERAMIC CHIP 68PF 5% (KV-M2541A/M2540B/M2540D/M2541D/M2541L/M2541U)	50V
	1-163-093-00	CERAMIC CHIP 10PF 5% (KV-M2540E/M2541E/M2540K/M2541K)	50V
C350	1-165-320-11	CERAMIC CHIP 0.47MF 10%	16V
C351	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C352	1-163-109-00	CERAMIC CHIP 47PF 5%	50V
C353	1-124-477-11	ELECT 47MF 20%	16V
C355	1-163-109-00	CERAMIC CHIP 47PF 5% (KV-M2541A/M2540B/M2540D/M2541D/M2540E/M2541E/M2540K/M2541K)	50V
	1-163-113-00	CERAMIC CHIP 68PF 5%	50V (KV-M2541L/M2541U)
C359	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C361	1-124-907-11	ELECT 10MF 20%	50V
C362	1-163-125-00	CERAMIC CHIP 220PF 5%	50V
C363	1-163-101-00	CERAMIC CHIP 22PF 5% (KV-M2541A/M2540B/M2540D/M2541D/M2540E/M2541E/M2540K/M2541K)	50V
C382	1-124-907-11	ELECT 10MF 20%	50V
C383	1-163-101-00	CERAMIC CHIP 22PF 5%	50V
C406	1-124-907-11	ELECT 10MF 20%	50V
C407	1-164-346-11	CERAMIC CHIP 1MF	16V
C409	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C410	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C411	1-124-477-11	ELECT 47MF 20%	16V
C418	1-163-121-00	CERAMIC CHIP 150PF 5%	50V
C420	1-216-295-91	METAL GLAZE 0 5%	1/10W
C421	1-124-917-11	ELECT 33MF 20%	50V
C422	1-163-121-00	CERAMIC CHIP 150PF 5%	50V
C423	1-124-477-11	ELECT 47MF 20%	16V
C425	1-163-017-00	CERAMIC CHIP 0.0047MF 10%	50V
C426	1-164-346-11	CERAMIC CHIP 1MF	16V
C427	1-124-477-11	ELECT 47MF 20%	16V
C428	1-164-346-11	CERAMIC CHIP 1MF	16V
C430	1-124-477-11	ELECT 47MF 20%	16V
C431	1-163-017-00	CERAMIC CHIP 0.0047MF 10%	50V
C433	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C435	1-126-101-11	ELECT 100MF 20%	16V

REF.NO.	PART NO.	DESCRIPTION	REMARK
C445	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
		< C1002 - C1033 >	
		(KV-M2541A/M2541D/M2541E/M2541K/M2541L/M2541U)	
C1002	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1003	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C1004	1-163-097-00	CERAMIC CHIP 15PF 5% 50V	
C1005	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C1007	1-163-125-00	CERAMIC CHIP 220PF 5% 50V	
C1008	1-163-125-00	CERAMIC CHIP 220PF 5% 50V	
C1009	1-163-097-00	CERAMIC CHIP 15PF 5% 50V	
C1011	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C1013	1-164-346-11	CERAMIC CHIP 1MF 16V	
		(KV-M2541A/M2541D/M2541L/M2541U)	
C1015	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C1016	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C1018	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1019	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1020	1-124-916-11	ELECT 22MF 20% 50V	
C1021	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1024	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C1025	1-124-477-11	ELECT 47MF 20% 16V	
C1026	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1027	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1028	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1029	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1030	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1031	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1032	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1033	1-124-907-11	ELECT 10MF 20% 50V	
		< CERAMIC FILTER >	
CF101	1-760-154-21	TRAP, CERAMIC	
		(KV-M2540B/M2540D/M2541D/M2540E/M2541E/M2540K/ M2541K)	
CF102	1-404-134-00	TRAP, CERAMIC (5.5MHZ)	
		(KV-M2541A/M2540D/M2541D/M2540E/M2541E/M2540K/ M2541K)	
	1-409-430-11	TRAP, CERAMIC (6.5MHZ) (KV-M2540B)	
	1-409-333-00	TRAP, CERAMIC (6.0MHZ) (KV-M2541L/M2541U)	
CF103	1-760-106-21	FILTER, CERAMIC	
		(KV-M2541A/M2540B/M2540D/M2541D/M2540E/M2541E/ M2540K/M2541K)	
CF104	1-567-100-00	FILTER, CERAMIC (KV-M2540B/M2541L/ M2541U)	
CF109	1-760-154-21	TRAP, CERAMIC (KV-M2541A/M2540B/ M2540D/M2541D)	
		< CONNECTOR >	
CN001	1-695-302-11	CONNECTOR, BOARD TO BOARD 50P	
CN002	*1-568-882-51	PIN, CONNECTOR 7P	
CN003	*1-568-879-11	PIN, CONNECTOR 4P	
		< DIODE >	
D6	8-719-047-41	DIODE UMZ12N-T146	
D7	8-719-041-97	DIODE MA113-TX	
D9	8-719-041-97	DIODE MA113-TX	
D11	8-719-041-97	DIODE MA113-TX	
D12	8-719-049-64	DIODE MA715-TX (KV-M2540B/M2541E)	
D101	8-719-018-12	DIODE MA8330	
D102	8-719-914-43	DIODE DAN202K (KV-M2540B)	
D103	8-719-914-43	DIODE DAN202K (KV-M2540B/M2540D/ M2541D/M2540K/M2541K)	
D301	8-719-041-97	DIODE MA113-TX	
D302	8-719-041-97	DIODE MA113-TX	
D303	8-719-041-97	DIODE MA113-TX	
D304	8-719-041-97	DIODE MA113-TX	
D305	8-719-041-97	DIODE MA113-TX	
D314	8-719-047-16	DIODE BAS216	
D315	8-719-041-97	DIODE MA113-TX	
D380	1-216-295-91	METAL GLAZE 0 5% 1/10W	
D401	8-719-047-41	DIODE UMZ12N-T146	
D404	8-719-047-41	DIODE UMZ12N-T146	
D405	8-719-047-41	DIODE UMZ12N-T146	
D406	8-719-047-41	DIODE UMZ12N-T146	
D407	8-719-047-41	DIODE UMZ12N-T146	
D408	8-719-047-41	DIODE UMZ12N-T146	
D409	8-719-047-41	DIODE UMZ12N-T146	
D410	8-719-047-41	DIODE UMZ12N-T146	
D411	8-719-047-41	DIODE UMZ12N-T146	
D1002	8-719-914-43	DIODE DAN202K	
		< IC >	
IC001	8-752-855-70	IC CXP85232-111Q-TL	
		(KV-M2540B/M2541D)	
	8-752-855-69	IC CXP85232-109Q-TL	
		(KV-M2541A/M2540D/M2541K)	
	8-752-854-74	IC CXP85232-110Q-TL	
		(KV-M2540E/M2540K)	
	8-752-851-53	IC CXP85232-107Q-TL	
		(KV-M2541E)	
IC002	8-759-277-89	IC ST24C16CM1-TR/A	
IC003	8-759-041-54	IC MN1382S	
IC004	8-759-041-54	IC MN1382S	
IC101	8-759-277-66	IC TDA9814T-V2	
IC201	8-759-252-12	IC TDA6622-5X-GEG	
IC202	8-759-514-57	IC BA7046F	
IC301	8-759-251-57	IC TDA8366T	
IC302	8-759-086-97	IC TDA4661T/V2	
IC303	8-759-251-56	IC TDA8395T	
		(KV-M2540B/M2540D/M2541D/M2540K/M2541K)	
IC401	8-752-069-53	IC CXA1855Q-T6	
		< IC1001 - IC1003 >	
		(KV-M2541A/M2541D/M2541E/M2541K/M2541L/M2541U)	
IC1001	8-759-252-08	IC CF72306DW-R	
IC1002	8-759-275-29	IC CF70205AFN-R	
IC1003	8-759-300-71	IC HD14053BFP	
		< COIL >	
L1	1-412-010-41	INDUCTOR CHIP 22UH	
L101	1-408-609-41	INDUCTOR 33UH	
L102	1-410-214-31	INDUCTOR CHIP 68UH	
L103	1-408-419-00	INDUCTOR 68UH	
L104	1-414-170-11	INDUCTOR CHIP 100UH	
		(KV-M2540B)	
L105	1-408-411-00	INDUCTOR 15UH	
		(KV-M2541A/M2540D/M2541D/M2540E/M2541E/M2540K/ M2541K/M2541L/M2541U)	
	1-408-406-00	INDUCTOR 5.6UH	
		(KV-M2540B)	

A

REF.NO.	PART NO.	DESCRIPTION	REMARK
L107	1-410-985-11	INDUCTOR CHIP 0.22UH	
L108	1-408-409-00	INDUCTOR 10UH	
	(KV-M2541A/M2540D/M2541D/M2540E/M2541E/M2540K/M2541K/M2541L/M2541U)		
	1-408-414-00	INDUCTOR 27UH	
		(KV-M2540B)	
L109	1-412-010-41	INDUCTOR CHIP 22UH	
L110	1-412-004-31	INDUCTOR CHIP 6.8UH	
L111	1-414-170-11	INDUCTOR CHIP 100UH	
L304	1-412-006-31	INDUCTOR CHIP 10UH	
L305	1-412-006-31	INDUCTOR CHIP 10UH	
L306	1-412-006-31	INDUCTOR CHIP 10UH	
L307	1-408-609-41	INDUCTOR 33UH	
L308	1-408-424-00	INDUCTOR 180UH	
L309	1-408-424-00	INDUCTOR 180UH	
L310	1-408-407-00	INDUCTOR 6.8UH	
L401	1-410-214-31	INDUCTOR CHIP 68UH	
	< L1001 - L1003 >		
	(KV-M2541A/M2541D/M2541E/M2541K/M2541L/M2541U)		
L1001	1-408-419-00	INDUCTOR 68UH	
L1002	1-408-419-00	INDUCTOR 68UH	
L1003	1-410-999-11	INDUCTOR CHIP 3.3UH	
	< COIL >		
T101	1-403-686-11	COIL	
	< TRANSISTOR >		
Q4	8-729-901-01	TRANSISTOR DTC144EK	
Q8	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q11	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q12	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q13	8-729-920-74	TRANSISTOR 2SC2412K-QR	
		(KV-M2541A/M2540B)	
Q14	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q102	8-729-104-80	TRANSISTOR 2SC3355	
Q103	8-729-900-53	TRANSISTOR DTC114EK	
		(KV-M2540B)	
Q104	8-729-900-53	TRANSISTOR DTC114EK	
		(KV-M2540B)	
Q105	8-729-900-53	TRANSISTOR DTC114EK	
		(KV-M2540B)	
Q107	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q108	8-729-907-26	TRANSISTOR IMX1	
Q116	8-729-901-01	TRANSISTOR DTC144EK-T147	
	(KV-M2540B/M2540D/M2541D/M2540K/M2541K)		
Q117	8-729-901-01	TRANSISTOR DTC144EK-T147	
	(KV-M2540B/M2540D/M2541D/M2540K/M2541K)		
Q120	8-729-216-22	TRANSISTOR 2SA1162-G	
Q121	8-729-216-22	TRANSISTOR 2SA1162-G	
		(KV-M2540B)	
Q123	8-729-901-01	TRANSISTOR DTC144EK	
Q125	8-729-900-53	TRANSISTOR DTC114EK	
		(KV-M2540B)	
Q131	8-729-216-22	TRANSISTOR 2SA1162-G	
Q132	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q133	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q134	8-729-900-53	TRANSISTOR DTC114EK	
Q304	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q312	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q313	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q314	8-729-900-53	TRANSISTOR DTC114EK	
Q380	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q381	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q401	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q402	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q403	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q404	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q406	8-729-216-22	TRANSISTOR 2SA1162-G	
Q407	8-729-923-89	TRANSISTOR DTC123EK-T147	
Q408	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1001	8-729-920-74	TRANSISTOR 2SC2412K-QR	
	< RESISTOR >		
JR3	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR8	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR9	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR10	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR12	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR13	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR14	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR15	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR16	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR17	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR18	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR19	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR28	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR51	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR52	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR55	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR56	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR57	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR58	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR59	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR60	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR61	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR62	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR63	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR64	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR65	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR69	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR70	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR71	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR113	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR120	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR122	1-216-295-91	METAL GLAZE 0 5% 1/10W	
	(KV-M2541A/M2540D/M2541D/M2540E/M2541E/M2540K/M2541K/M2541L/M2541U)		
JR123	1-216-295-91	METAL GLAZE 0 5% 1/10W	
	(KV-M2541A/M2540D/M2541D/M2540E/M2541E/M2540K/M2541K/M2541L/M2541U)		
JR125	1-216-295-91	METAL GLAZE 0 5% 1/10W	
		(KV-M2541A/M2540E/M2541E)	
JR126	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR127	1-216-295-91	METAL GLAZE 0 5% 1/10W	
		(KV-M2541L/M2541U)	
JR201	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR401	1-216-295-91	METAL GLAZE 0 5% 1/10W	
		(KV-M2540B/M2540D/M2540E/M2540K)	
JR402	1-216-295-91	METAL GLAZE 0 5% 1/10W	
		(KV-M2540B/M2540D/M2540E/M2540K)	

REF.NO.	PART NO.	DESCRIPTION	REMARK
JR403	1-216-295-91	METAL GLAZE 0 5% 1/10W (KV-M2540B/M2540D/M2540E/M2540K)	
JR404	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR405	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR406	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR407	1-216-295-91	METAL GLAZE 0 5% 1/10W	
JR1004	1-216-295-91	METAL GLAZE 0 5% 1/10W	
R1	1-216-049-00	METAL GLAZE 1K 5% 1/10W (KV-M2540B)	
R6	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R16	1-216-049-00	METAL GLAZE 1K 5% 1/10W (KV-M2540B)	
R21	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R24	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R25	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R26	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R27	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R29	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R31	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R33	1-216-063-00	METAL GLAZE 3.9K 5% 1/10W	
R35	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R44	1-216-121-00	METAL GLAZE 1M 5% 1/10W	
R46	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R47	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R49	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R50	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R54	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R59	1-216-121-00	METAL GLAZE 1M 5% 1/10W	
R60	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R61	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R66	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R70	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R71	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R72	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R73	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
R75	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R76	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R77	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R78	1-216-037-00	METAL GLAZE 330 5% 1/10W	
R79	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R82	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R83	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R84	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R85	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R86	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R87	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R88	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R89	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R90	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R91	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R92	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R93	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R94	1-216-039-00	METAL GLAZE 390 5% 1/10W	
R95	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R96	1-216-071-00	METAL GLAZE 8.2K 5% 1/10W	
R97	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R99	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R101	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R103	1-216-077-00	METAL GLAZE 15K 5% 1/10W	
R104	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R105	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R106	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R107	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	
R108	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
R109	1-216-180-00	METAL GLAZE 180 5% 1/8W	
R110	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R111	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R112	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R113	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R114	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R115	1-218-755-11	METAL CHIP 130K 0.50% 1/10W	
R116	1-216-113-00	METAL GLAZE 470K 5% 1/10W	
R117	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R118	1-216-107-00	METAL GLAZE 270K 5% 1/10W	
R119	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R121	1-216-035-00	METAL GLAZE 270 5% 1/10W	
R122	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R123	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R124	1-216-031-00	METAL GLAZE 180 5% 1/10W	
R125	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R126	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R127	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R130	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R131	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R134	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W (KV-M2540B/M2540D/M2541D/M2540K/M2541K)	
R135	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W (KV-M2540B/M2540D/M2541D/M2540K/M2541K)	
R136	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R139	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R140	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R143	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W (KV-M2540B/M2540D/M2541D/M2540K/M2541K)	
R144	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
R146	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R147	1-216-033-00	METAL GLAZE 220 5% 1/10W (KV-M2541A/M2540D/M2541D/M2540E/M2541E/M2540K/M2541K)	
	1-216-031-00	METAL GLAZE 180 5% 1/10W (KV-M2540B)	
	1-216-037-00	METAL GLAZE 330 5% 1/10W (KV-M2541L/M2541U)	
R150	1-216-295-91	METAL GLAZE 0 5% 1/10W (KV-M2541A/M2540B/M2540D/M2541D/M2540E/M2541E/M2540K/M2541K)	
	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W (KV-M2541L/M2541U)	
R151	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R152	1-216-174-00	METAL GLAZE 100 5% 1/8W	
R160	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R161	1-216-031-00	METAL GLAZE 180 5% 1/10W (KV-M2541A/M2540B/M2540D/M2541D/M2540E/M2541E/M2540K/M2541K)	
	1-216-047-00	METAL GLAZE 820 5% 1/10W (KV-M2541L/M2541U)	
R162	1-216-017-00	METAL GLAZE 47 5% 1/10W	
R163	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R164	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R165	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R166	1-216-097-00	METAL GLAZE 100K 5% 1/10W	
R170	1-216-073-00	METAL GLAZE 10K 5% 1/10W	

A

REF.NO.	PART NO.	DESCRIPTION				REMARK
R171	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R172	1-216-295-91	METAL GLAZE	0	5%	1/10W	
R173	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R174	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R180	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R182	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R183	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R185	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R186	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R193	1-216-049-00	METAL GLAZE	1K	5%	1/10W	(KV-M2540B)
R194	1-216-180-00	METAL GLAZE	180	5%	1/8W	
R195	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R196	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R199	1-216-037-00	METAL GLAZE	330	5%	1/10W	(KV-M2541A/M2540D/M2541D/M2540E/M2541E/M2540K/M2541K)
	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	(KV-M2540B)
	1-216-049-00	METAL GLAZE	1K	5%	1/10W	(KV-M2541L/M2541U)
R200	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R201	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R204	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R205	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R206	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R207	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R210	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R211	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R216	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R217	1-216-031-00	METAL GLAZE	180	5%	1/10W	
R220	1-216-174-00	METAL GLAZE	100	5%	1/8W	
R305	1-216-049-00	METAL GLAZE	1K	5%	1/10W	(KV-M2541L/M2541U)
R308	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R309	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R311	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R313	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R315	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R316	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R317	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R318	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R319	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R320	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R321	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R322	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R323	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R325	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R326	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R327	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R328	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R329	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R330	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R331	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R332	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R333	1-216-689-11	METAL CHIP	39K	0.50%	1/10W	
R340	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R341	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R342	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R351	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	(KV-M2541A/M2540B/M2540D/M2541D/M2541L/M2541U)
R352	1-216-123-11	METAL GLAZE	1.2M	5%	1/10W	
R354	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R355	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R356	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R364	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R365	1-216-025-00	METAL GLAZE	100	5%	1/10W	(KV-M2541A/M2540B/M2540D/M2541D/M2540E/M2541E/M2540K/M2541K)
	1-216-027-00	METAL GLAZE	120	5%	1/10W	(KV-M2541L/M2541U)
R370	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R371	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R372	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R373	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R380	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R381	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R382	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R383	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R384	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R385	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R386	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R387	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R388	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R389	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R390	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R392	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R393	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R407	1-216-198-91	METAL GLAZE	1K	5%	1/8W	
R408	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R409	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R410	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R413	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R415	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R417	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R419	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R420	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R421	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R422	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R423	1-216-093-00	METAL GLAZE	68K	5%	1/10W	
R424	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R425	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R426	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R427	1-216-188-00	METAL GLAZE	390	5%	1/8W	
R429	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R430	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R431	1-216-188-00	METAL GLAZE	390	5%	1/8W	
R432	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R433	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R435	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R437	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R438	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R439	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R446	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R447	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R454	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R458	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R464	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R465	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R473	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R474	1-216-049-00	METAL GLAZE	1K	5%	1/10W	

A C

The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
R477	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W (KV-M2541L/M2541U)	
R482	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R483	1-216-051-00	METAL GLAZE 1.2K 5% 1/10W (KV-M2541A/M2540B/M2540D/M2541D/M2540E/M2541E/M2540K/M2541K)	
	1-216-047-00	METAL GLAZE 820 5% 1/10W (KV-M2541L/M2541U)	
R484	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R485	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R486	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R487	1-216-022-00	METAL GLAZE 75 5% 1/10W	
R488	1-216-022-00	METAL GLAZE 75 5% 1/10W	
R489	1-216-022-00	METAL GLAZE 75 5% 1/10W	
	< R1001 - R1029 > (KV-M2541A/M2541D/M2541E/M2541K/M2541L/M2541U)		
R1001	1-216-295-91	METAL GLAZE 0 5% 1/10W	
R1002	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R1004	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1005	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1008	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
R1009	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R1010	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	
R1011	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	
R1012	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	
R1014	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R1015	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R1016	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1025	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R1026	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R1027	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R1029	1-216-025-00	METAL GLAZE 100 5% 1/10W	
	< VARIABLE RESISTOR >		
RV102	1-241-765-11	RES, ADJ, CARBON 22K (KV-M2540B)	
	< RESISTOR NETWORK >		
RA1	1-236-908-11	RESISTOR, NETWORK (CHIP TYPE)	
RA2	1-236-908-11	RESISTOR, NETWORK (CHIP TYPE)	
RA3	1-236-908-11	RESISTOR, NETWORK (CHIP TYPE)	
RA7	1-236-908-11	RESISTOR, NETWORK (CHIP TYPE)	
RA8	1-239-412-11	NETWORK, RESISTOR (CHIP TYPE)	
RA9	1-239-412-11	NETWORK, RESISTOR (CHIP TYPE)	
RA10	1-236-908-11	RESISTOR, NETWORK (CHIP TYPE)	
RA11	1-236-904-11	RESISTOR, NETWORK (CHIP TYPE)	
	< FILTER >		
SWF101	1-579-273-11	FILTER, SURFACE WAVE (KV-M2541A/M2540B/M2540D/M2541D/M2540E/M2541E/M2540K/M2541K/M2541L)	
	1-760-330-11	FILTER, SURFACE WAVE (KV-M2541U)	
SWF102	1-760-329-11	FILTER, SURFACE WAVE (KV-M2541A/M2540D/M2541D/M2540E/M2541E/M2540K/M2541K/M2541L/M2541U)	
	1-760-244-11	FILTER, SURFACE WAVE (KV-M2540B)	
	< TUNER >		
TU101	1-693-185-11	TUNER (UV916H) (KV-M2541A/M2540B/M2540D/M2541D/M2540E/M2541E/M2540K/M2541K/M2541L)	
	1-693-184-11	TUNER (U944C) (KV-M2541U)	
	< CRYSTAL >		
X2	1-579-063-21	VIBRATOR, CERAMIC	
X301	1-760-331-11	VIBRATOR, CRYSTAL	
X1001	1-567-495-11	OSCILLATOR, CRYSTAL (KV-M2541A/M2541D/M2541E/M2541K/M2541L/M2541U)	
**********			
	*A-1638-052-A	C BOARD, COMPLETE **********	
	< CAPACITOR >		
C702	1-102-824-00	CERAMIC 470PF 5% 50V	
C703	1-102-115-00	CERAMIC 560PF 10% 50V	
C704	1-102-117-00	CERAMIC 820PF 10% 50V	
C706	1-102-113-00	CERAMIC 390PF 10% 50V	
C706	1-102-822-00	CERAMIC 390PF 5% 50V	
C707	1-162-116-00	CERAMIC 680PF 10% 2KV	
C708	1-162-114-00	CERAMIC 0.0047MF 2KV	
C709	1-102-114-00	CERAMIC 470PF 10% 50V	
C710	1-123-947-00	ELECT 10MF 20% 250V	
C712	1-102-115-00	CERAMIC 560PF 10% 50V	
C714	1-124-360-00	ELECT 1000MF 20% 16V	
C717	1-102-114-00	CERAMIC 470PF 10% 50V	
C718	1-102-114-00	CERAMIC 470PF 10% 50V	
C719	1-102-114-00	CERAMIC 470PF 10% 50V	
	< CONNECTOR >		
CN701	1-508-768-00	PIN, CONNECTOR (5MM PITCH) 6P	
CN703	*1-568-882-51	PIN, CONNECTOR 7P	
CN705	1-695-915-11	TAB (CONTACT)	
	< DIODE >		
D701	8-719-110-14	DIODE RD9.1ESB3	
D702	8-719-901-33	DIODE 1SS133	
D703	8-719-901-33	DIODE 1SS133	
D704	8-719-901-33	DIODE 1SS133	
D705	8-719-901-33	DIODE 1SS133	
D706	8-719-901-33	DIODE 1SS133	
D707	8-719-901-33	DIODE 1SS133	
D708	8-719-901-33	DIODE 1SS133	
D709	8-719-901-33	DIODE 1SS133	
D710	8-719-901-33	DIODE 1SS133	
D711	8-719-302-43	DIODE EL1Z	
D713	8-719-901-33	DIODE 1SS133	
	< CRT SOCKET >		
J701	⚠ 1-526-990-11	SOCKET, CRT	
	< COIL >		
L704	1-408-609-41	INDUCTOR 33UH	
	< TRANSISTOR >		
Q702	8-729-119-78	TRANSISTOR 2SC2785-HFE	

The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

C D

REF.NO.	PART NO.	DESCRIPTION				REMARK
Q703	8-729-906-70	TRANSISTOR BF871				
Q704	8-729-200-17	TRANSISTOR 2SA1091-O				
Q705	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q706	8-729-906-70	TRANSISTOR BF871				
Q707	8-729-200-17	TRANSISTOR 2SA1091-O				
Q708	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q709	8-729-906-70	TRANSISTOR BF871				
Q710	8-729-200-17	TRANSISTOR 2SA1091-O				
		< RESISTOR >				
R704	1-216-486-00	METAL OXIDE	8.2K	5%	3W	F
R705	1-202-822-00	SOLID	2.2K	10%	1/2W	
R706	1-249-409-11	CARBON	220	5%	1/4W	
R707	1-249-408-11	CARBON	180	5%	1/4W	
R709	1-202-844-00	SOLID	330K	10%	1/2W	
R711	1-249-423-11	CARBON	3.3K	5%	1/4W	
R712	1-202-822-00	SOLID	2.2K	10%	1/2W	
R713	1-215-493-00	METAL	1M	1%	1/4W	
R714	1-216-486-00	METAL OXIDE	8.2K	5%	3W	F
R715	1-249-417-11	CARBON	1K	5%	1/4W	
R716	1-249-409-11	CARBON	220	5%	1/4W	
R717	1-249-408-11	CARBON	180	5%	1/4W	
R718	1-202-814-11	SOLID	33K	10%	1/2W	
R720	1-249-423-11	CARBON	3.3K	5%	1/4W	
R722	1-202-848-00	SOLID	680K	10%	1/2W	
R723	1-249-417-11	CARBON	1K	5%	1/4W	
R724	1-202-846-00	SOLID	470K	10%	1/2W	
R726	1-202-822-00	SOLID	2.2K	10%	1/2W	
R727	1-249-409-11	CARBON	220	5%	1/4W	
R728	1-216-350-11	METAL OXIDE	1.2	5%	1W	F
R729	1-249-408-11	CARBON	180	5%	1/4W	
R731	1-249-423-11	CARBON	3.3K	5%	1/4W	
R732	1-215-479-00	METAL	270K	1%	1/4W	
R734	1-247-807-31	CARBON	100	5%	1/4W	
R736	1-216-486-00	METAL OXIDE	8.2K	5%	3W	F
R737	1-215-489-00	METAL	680K	1%	1/4W	
R739	1-249-417-11	CARBON	1K	5%	1/4W	
R741	1-202-549-00	SOLID	100	20%	1/2W	
R743	1-202-842-11	SOLID	220K	10%	1/2W	
		< VARIABLE RESISTOR >				
RV701	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M				
RV702	1-241-656-11	RES, ADJ, METAL FILM 110M				
**********						
	*A-1642-121-A	D BOARD, COMPLETE				
		**********				
	4-201-023-01	SPACER, INSULATING				
	4-202-373-01	SPRING, IC				
		< CAPACITOR >				
C502	1-102-824-00	CERAMIC	470PF	5%	50V	
C503	1-136-165-00	FILM	0.1MF	5%	50V	
C504	1-102-824-00	CERAMIC	470PF	5%	50V	
C506	1-124-480-11	ELECT	470MF	20%	25V	
C507	1-124-767-00	ELECT	2.2MF	20%	50V	
C509	1-136-165-00	FILM	0.1MF	5%	50V	
C510	1-124-911-11	ELECT	220MF	20%	50V	
C511	1-136-202-11	FILM	0.33MF	5%	63V	
C513	1-106-220-00	MYLAR	0.1MF	10%	100V	

REF.NO.		PART NO.	DESCRIPTION			REMARK
C514		1-136-165-00	FILM	0.1MF	5%	50V
C515		1-124-480-11	ELECT	470MF	20%	25V
C517		1-124-480-11	ELECT	470MF	20%	25V
C518		1-102-228-00	CERAMIC	470PF	10%	500V
C519		1-102-228-00	CERAMIC	470PF	10%	500V
C520		1-124-480-11	ELECT	470MF	20%	25V
C521		1-124-006-11	ELECT	10MF	20%	25V
C522		1-124-907-11	ELECT	10MF	20%	50V
C523		1-136-165-00	FILM	0.1MF	5%	50V
C600	⚠	1-161-742-00	CERAMIC	0.0022MF	20%	400V
C601	⚠	1-162-599-12	CERAMIC	0.0047MF		250V
C602	⚠	1-162-599-12	CERAMIC	0.0047MF		250V
C603		1-125-318-00	ELECT(BLOCK)	220MF	20%	400V
C604		1-124-122-11	ELECT	100MF	20%	50V
C605		1-124-667-11	ELECT	10MF	20%	100V
C606		1-162-318-11	CERAMIC	0.001MF	10%	500V
C607		1-124-120-11	ELECT	220MF	20%	25V
C608		1-109-880-11	FILM	0.0015MF	3%	2KV
C611		1-102-228-00	CERAMIC	470PF	10%	500V
C612		1-104-799-11	ELECT	22MF	20%	100V
C613		1-124-347-00	ELECT	100MF	20%	160V
C614		1-126-804-11	ELECT	100MF	20%	25V
C615		1-126-376-11	ELECT	470MF	20%	25V
C616		1-128-386-11	ELECT	1000MF	20%	25V
C617		1-126-183-11	ELECT	1000MF	20%	16V
C618		1-136-165-00	FILM	0.1MF	5%	50V
C619		1-102-228-00	CERAMIC	470PF	10%	500V
C620		1-102-228-00	CERAMIC	470PF	10%	500V
C621		1-136-165-00	FILM	0.1MF	5%	50V
C622		1-104-797-11	ELECT	0.47MF	20%	100V
C623		1-124-120-11	ELECT	220MF	20%	25V
C624		1-136-165-00	FILM	0.1MF	5%	50V
C625		1-124-910-11	ELECT	47MF	20%	50V
C626		1-124-120-11	ELECT	220MF	20%	25V
C627		1-124-120-11	ELECT	220MF	20%	25V
C628		1-124-907-11	ELECT	10MF	20%	50V
C629		1-126-800-51	ELECT	2200MF	20%	35V
C630		1-126-800-51	ELECT	2200MF	20%	35V
C631		1-124-916-11	ELECT	22MF	20%	50V
C632		1-124-120-11	ELECT	220MF	20%	25V
C633	⚠	1-107-564-11	FILM	0.22MF	20%	300V
C634	⚠	1-107-564-11	FILM	0.22MF	20%	300V
C635	⚠	1-107-564-11	FILM	0.22MF	20%	300V
C636	⚠	1-161-742-00	CERAMIC	0.0022MF	20%	400V
C639		1-136-165-00	FILM	0.1MF	5%	50V
C640		1-106-220-00	MYLAR	0.1MF	10%	100V
C647		1-162-116-00	CERAMIC	680PF	10%	2KV
C800		1-137-437-11	FILM	0.0056MF	5%	50V
C801		1-136-153-00	FILM	0.01MF	5%	50V
C804		1-136-165-00	FILM	0.1MF	5%	50V
C805		1-106-395-00	MYLAR	0.15MF	10%	200V
C806		1-108-704-11	MYLAR	0.1MF	10%	200V
C807		1-136-111-00	FILM	1MF	5%	200V
C810		1-124-634-11	ELECT	1MF	20%	250V
C811		1-102-212-00	CERAMIC	820PF	10%	500V
C812		1-136-111-00	FILM	1MF	5%	200V
C813		1-136-759-11	FILM	0.039MF	10%	630V
C814		1-136-591-11	FILM	0.017MF	3%	1.4KV
C815		1-136-562-11	MYLAR	0.0082MF	10%	400V
C816		1-161-754-00	CERAMIC	0.001MF	10%	2KV

The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

REF.NO.	PART NO.	DESCRIPTION			REMARK
C817	1-161-754-00	CERAMIC	0.001MF	10%	2KV
C818	1-162-134-11	CERAMIC	470PF	10%	2KV
C819	1-136-208-11	FILM	0.068MF	10%	250V
C820	1-102-114-00	CERAMIC	470PF	10%	50V
C821	1-162-114-00	CERAMIC	0.0047MF		2KV
C822	1-123-948-00	ELECT	22MF	20%	250V
C824	1-123-024-21	ELECT	33MF		160V
C829	1-124-902-00	ELECT	0.47MF	20%	50V
C830	1-136-165-00	FILM	0.1MF	5%	50V
C832	1-136-173-00	FILM	0.47MF	5%	50V
C834	1-126-233-11	ELECT	22MF	20%	25V
C835	1-162-318-11	CERAMIC	0.001MF	10%	500V
C836	1-162-117-00	CERAMIC	100PF	10%	500V
C838	1-102-228-00	CERAMIC	470PF	10%	500V
C906	1-124-910-11	ELECT	47MF	20%	50V
C908	1-124-910-11	ELECT	47MF	20%	50V
C909	1-124-903-11	ELECT	1MF	20%	50V
C910	1-137-393-91	FILM	0.01MF	5%	100V
C1200	1-136-165-00	FILM	0.1MF	5%	50V
C1201	1-136-165-00	FILM	0.1MF	5%	50V
C1202	1-136-165-00	FILM	0.1MF	5%	50V
C1203	1-136-169-00	FILM	0.22MF	5%	50V
C1204	1-136-169-00	FILM	0.22MF	5%	50V
C1205	1-101-005-00	CERAMIC	0.022MF		50V
C1206	1-101-005-00	CERAMIC	0.022MF		50V
C1207	1-126-101-11	ELECT	100MF	20%	16V
C1208	1-124-927-11	ELECT	4.7MF	20%	50V
C1209	1-124-927-11	ELECT	4.7MF	20%	50V
C1210	1-124-925-11	ELECT	2.2MF	20%	50V
C1211	1-124-925-11	ELECT	2.2MF	20%	50V
C1214	1-126-101-11	ELECT	100MF	20%	16V
C1215	1-136-173-00	FILM	0.47MF	5%	50V
C1216	1-137-366-11	FILM	0.0022MF	5%	50V
C1217	1-137-366-11	FILM	0.0022MF	5%	50V
C1218	1-124-120-11	ELECT	220MF	20%	16V

< CONNECTOR >

CN600	⚠ 1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P	
CN601	⚠ 1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P	
CN602	⚠ *1-695-292-11	PIN, CONNECTOR (POWER)	
CN800	*1-580-798-11	CONNECTOR PIN (DY) 6P	
CN803	1-695-915-11	TAB (CONTACT)	
CN804	1-508-768-00	PIN, CONNECTOR (5MM PITCH) 6P	
CN807	1-568-878-51	PIN, CONNECTOR 3P	
CN901	*1-564-520-11	PLUG, CONNECTOR 5P	
CN902	1-695-299-11	CONNECTOR, BOARD TO BOARD 50P	
CN903	*1-564-516-11	PLUG, CONNECTOR 13P	
CN904	*1-564-509-11	PLUG, CONNECTOR 6P	
CN904	*1-568-881-51	PIN, CONNECTOR 6P	
CN905	*1-564-509-11	PLUG, CONNECTOR 6P	
CN905	*1-568-878-51	PIN, CONNECTOR 3P	
CN1200	*1-568-879-11	PIN, CONNECTOR 4P	
CN1201	*1-568-878-51	PIN, CONNECTOR 3P	

< DIODE >

D500	8-719-109-85	DIODE RD5.1ESB2
D502	8-719-979-85	DIODE EGP20G
D503	8-719-979-85	DIODE EGP20G
D504	8-719-901-33	DIODE 1SS133
D505	8-719-982-03	DIODE MTZJ-3.6A
D506	8-719-901-33	DIODE 1SS133
D507	8-719-109-85	DIODE RD5.1ESB2
D600	8-719-510-53	DIODE D4SB60L
D601	8-719-046-77	DIODE EM1-V1
D603	8-719-109-97	DIODE RD6.8ESB2
D604	8-719-046-75	DIODE EU-1-V1
D605	8-719-312-61	DIODE EU-1Z
D606	8-719-312-61	DIODE EU-1Z
D607	8-719-046-78	DIODE EG-1Z-V1
D608	8-719-046-75	DIODE EU-1-V1
D609	8-719-301-64	DIODE RU4DS
D610	8-719-046-74	DIODE AU-01Z-V1
D611	8-719-302-43	DIODE EL1Z
D612	8-719-046-76	DIODE RU-3YX-V1
D613	8-719-302-43	DIODE EL1Z
D614	8-719-302-43	DIODE EL1Z
D615	8-719-046-75	DIODE EU-1-V1
D616	8-719-110-03	DIODE RD7.5ESB2
D617	8-719-901-33	DIODE 1SS133
D618	8-719-901-33	DIODE 1SS133
D619	8-719-901-33	DIODE 1SS133
D620	8-719-901-33	DIODE 1SS133
D622	8-719-921-69	DIODE MTZJ-9.1
D625	8-719-901-33	DIODE 1SS133
D626	8-719-046-74	DIODE AU-01Z-V1
D800	8-719-901-33	DIODE 1SS133
D801	8-719-901-33	DIODE 1SS133
D802	8-719-901-33	DIODE 1SS133
D803	8-719-908-03	DIODE GP08D
D807	8-719-302-43	DIODE EL1Z
D808	8-719-908-03	DIODE GP08D
D809	8-719-018-82	DIODE RGP02-20EL-6394
D810	8-719-302-43	DIODE EL1Z
D812	8-719-038-49	DIODE FMS-3FU-LF027-103
D815	8-719-908-03	DIODE GP08D
D817	8-719-109-89	DIODE RD5.6ESB2
D902	8-719-921-69	DIODE MTZJ-9.1
D903	8-719-921-69	DIODE MTZJ-9.1
D904	8-719-921-69	DIODE MTZJ-9.1
D905	8-719-921-69	DIODE MTZJ-9.1
D906	8-719-921-69	DIODE MTZJ-9.1
D1201	8-719-109-72	DIODE RD3.9ESB2
D1202	1-247-807-31	CARBON 100 5% 1/4W

< FERRITE BEAD >

FB600	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH
FB601	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH
FB602	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH
FB604	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB605	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB606	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH
FB607	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH

< IC >

IC500	8-759-192-71	IC STV9379
IC600	8-759-183-88	IC STR-S6708
IC601	⚠ 8-749-924-92	IC TLP721(D4)-GR
IC602	8-749-923-26	IC SE135N-LF12
IC603	8-759-925-54	IC LM2940CT-5.0
IC604	8-759-250-63	IC TL750L05CLPR

The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

D

REF.NO.	PART NO.	DESCRIPTION				REMARK
IC605	8-759-701-79	IC NJM7812FA				
IC606	8-759-267-25	IC LM2940T-90				
IC800	8-759-103-93	IC UPC393C				
IC1200	8-759-279-43	IC TDA7261				
IC1201	8-759-502-21	IC TDA2822M				
L502	1-412-519-11	INDUCTOR	3.3UH			
L503	1-412-519-11	INDUCTOR	3.3UH			
L609	1-412-533-21	INDUCTOR	47UH			
L611	1-412-527-11	INDUCTOR	15UH			
L612	1-414-415-11	INDUCTOR, WIDE BAND				
L613	1-414-415-11	INDUCTOR, WIDE BAND				
L801	1-459-111-00	COIL, DRAM CORE (CDI)				
L802	1-459-104-00	COIL, WITH CORE				
L803	1-420-872-00	COIL, AIR CORE				
L804	1-409-770-11	COIL, HORIZONTAL LINEARITY				
L805	1-406-675-11	COIL, CHOKE 4.7MMH				
L809	1-412-533-21	INDUCTOR	47UH			
		< IC LINK >				
⚠ PS600	1-532-686-21	LINK, IC 2.7A (ICP-F75)				
⚠ PS601	1-532-686-21	LINK, IC 2.7A (ICP-F75)				
⚠ PS602	1-532-686-21	LINK, IC 2.7A (ICP-F75)				
⚠ PS603	1-532-686-21	LINK, IC 2.7A (ICP-F75)				
⚠ PS801	1-532-605-00	LINK, IC 0.4A (ICP-F10)				
		< TRANSISTOR >				
Q501	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q502	8-729-173-38	TRANSISTOR 2SA733-K				
Q503	8-729-900-89	TRANSISTOR DTC144ES				
Q601	8-729-025-05	TRANSISTOR 2SC3852A-O				
Q602	8-729-320-28	TRANSISTOR 2SA1667				
Q603	8-729-027-08	TRANSISTOR 2SC2389STP-R				
Q604	8-729-024-35	TRANSISTOR 2SC2808STP-R				
Q605	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q606	8-729-900-65	TRANSISTOR DTA144ES				
Q607	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q800	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q801	8-729-017-06	TRANSISTOR 2SC4793				
Q802	8-729-016-32	TRANSISTOR 2SC4927-01				
Q803	8-729-119-80	TRANSISTOR 2SC2688-LK				
Q805	8-729-900-89	TRANSISTOR DTC144ES				
Q1200	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1201	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1202	8-729-900-80	TRANSISTOR DTC114ES				
Q1203	8-729-900-74	TRANSISTOR DTC143TS				
Q1204	8-729-900-74	TRANSISTOR DTC143TS				
		< RESISTOR >				
JW800	1-259-880-11	CARBON	2.2M	5%	1/4W	
R500	1-215-457-00	METAL	33K	1%	1/4W	
R502	1-249-421-11	CARBON	2.2K	5%	1/4W	
R503	1-249-429-11	CARBON	10K	5%	1/4W	
R504	1-215-463-00	METAL	56K	1%	1/4W	
R505	1-249-382-11	CARBON	1.2	5%	1/4W	F
R506	1-215-413-00	METAL	470	1%	1/4W	
R507	1-215-888-00	METAL OXIDE	220	5%	2W	F
R508	1-216-371-00	METAL OXIDE	1.5	5%	2W	F
R509	1-249-443-11	CARBON	0.47	5%	1/4W	F
R510	1-249-443-11	CARBON	0.47	5%	1/4W	F
R517	1-215-427-00	METAL	1.8K	1%	1/4W	
R518	1-215-427-00	METAL	1.8K	1%	1/4W	
R520	1-215-457-00	METAL	33K	1%	1/4W	
R521	1-215-459-00	METAL	39K	1%	1/4W	
R522	1-249-433-11	CARBON	22K	5%	1/4W	
R523	1-249-433-11	CARBON	22K	5%	1/4W	
R524	1-249-425-11	CARBON	4.7K	5%	1/4W	
R525	1-249-425-11	CARBON	4.7K	5%	1/4W	
R526	1-249-421-11	CARBON	2.2K	5%	1/4W	
R527	1-215-449-00	METAL	15K	1%	1/4W	
R528	1-259-877-11	CARBON	1.2M	5%	1/4W	
R529	1-247-895-00	CARBON	470K	5%	1/4W	
R600	1-216-490-71	METAL OXIDE	39K	5%	3W	F
R601	1-249-417-11	CARBON	1K	5%	1/4W	
R603	1-215-875-11	METAL OXIDE	10K	5%	1W	F
R604	1-249-420-11	CARBON	1.8K	5%	1/4W	
R605	1-216-362-71	METAL OXIDE	0.27	5%	2W	F
R607	1-216-421-71	METAL OXIDE	12	5%	1W	F
R608	1-216-365-00	METAL OXIDE	0.47	5%	2W	F
R610	1-249-417-11	CARBON	1K	5%	1/4W	
R611	1-215-859-00	METAL OXIDE	22	5%	1W	F
R612	1-249-428-11	CARBON	8.2K	5%	1/4W	
R613	1-249-417-11	CARBON	1K	5%	1/4W	
R614	1-215-877-11	METAL OXIDE	22K	5%	1W	F
R615	1-249-435-11	CARBON	33K	5%	1/4W	
R616	1-215-479-00	METAL	270K	1%	1/4W	
R617	1-215-901-00	METAL OXIDE	33K	5%	2W	F
R618	1-249-429-11	CARBON	10K	5%	1/4W	
R619	1-216-425-11	METAL OXIDE	56	5%	1W	F
R620	1-247-895-00	CARBON	470K	5%	1/4W	
R621	1-216-425-11	METAL OXIDE	56	5%	1W	F
R622	1-249-437-11	CARBON	47K	5%	1/4W	
R623	1-249-429-11	CARBON	10K	5%	1/4W	
R624	1-249-405-11	CARBON	100	5%	1/4W	F
R625	1-249-434-11	CARBON	27K	5%	1/4W	
R626	1-249-430-11	CARBON	12K	5%	1/4W	
R628	1-249-415-11	CARBON	680	5%	1/4W	F
⚠ R629	1-214-937-00	CARBON	1M	5%	1/2W	
⚠ R630	1-218-265-11	METAL GLAZE	8.2M	5%	1W	
⚠ R631	1-205-949-11	WIREWOUND	1.8	5%	10W	
R632	1-247-807-31	CARBON	100	5%	1/4W	
R633	1-247-807-31	CARBON	100	5%	1/4W	
R634	1-249-397-11	CARBON	22	5%	1/4W	F
R635	1-249-437-11	CARBON	47K	5%	1/4W	
R636	1-249-417-11	CARBON	1K	5%	1/4W	
R637	1-249-409-11	CARBON	220	5%	1/4W	
R638	1-249-433-11	CARBON	22K	5%	1/4W	
R639	1-249-429-11	CARBON	10K	5%	1/4W	
R640	1-216-381-11	METAL OXIDE	0.22	5%	3W	F
R641	1-216-381-11	METAL OXIDE	0.22	5%	3W	F
⚠ R642	1-205-949-11	WIREWOUND	1.8	5%	10W	
R643	1-249-423-11	CARBON	3.3K	5%	1/4W	
R644	1-247-807-31	CARBON	100	5%	1/4W	
R645	1-249-422-11	CARBON	2.7K	5%	1/4W	
R646	1-249-377-11	CARBON	0.47	5%	1/4W	F
R647	1-202-933-61	FUSIBLE	0.1	10%	1/2W	F
R648	1-216-397-11	METAL OXIDE	4.7	5%	3W	F
R800	1-249-421-11	CARBON	2.2K	5%	1/4W	
R801	1-249-429-11	CARBON	10K	5%	1/4W	

The components identified by shading and marked ! are critical for safety.
Replace only with the part number specified.

D H2 H1

REF.NO.	PART NO.	DESCRIPTION				REMARK
R802	1-249-431-11	CARBON	15K	5%	1/4W	
R803	1-249-426-11	CARBON	5.6K	5%	1/4W	
R804	1-249-430-11	CARBON	12K	5%	1/4W	
R805	1-249-425-11	CARBON	4.7K	5%	1/4W	
R809	1-247-901-11	CARBON	820K	5%	1/4W	
R812	1-249-421-11	CARBON	2.2K	5%	1/4W	
R813	1-215-869-11	METAL OXIDE	1K	5%	1W	F
R814	1-249-411-11	CARBON	330	5%	1/4W	
R816	1-215-918-00	METAL OXIDE	1.5K	5%	3W	F
R817	1-215-918-00	METAL OXIDE	1.5K	5%	3W	F
R818	1-215-882-00	METAL OXIDE	22	5%	2W	F
R819	1-216-345-11	METAL OXIDE	0.47	5%	1W	F
R820	1-249-403-11	CARBON	68	5%	1/4W	
R821	1-215-909-11	METAL OXIDE	47	5%	3W	F
R822	1-215-868-00	METAL OXIDE	680	5%	1W	F
R824	1-249-420-11	CARBON	1.8K	5%	1/4W	
R826	1-247-752-11	CARBON	1K	5%	1/2W	
R827	1-249-425-11	CARBON	4.7K	5%	1/4W	
R828	1-249-433-11	CARBON	22K	5%	1/4W	
R829	1-215-463-00	METAL	56K	1%	1/4W	
R830	1-217-778-11	FUSIBLE	1K	5%	1W	F
R833	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R836	1-249-439-11	CARBON	68K	5%	1/4W	
R837	1-215-449-00	METAL	15K	1%	1/4W	
R840	1-247-807-31	CARBON	100	5%	1/4W	
R841	1-249-418-11	CARBON	1.2K	5%	1/4W	
R842	1-249-441-11	CARBON	100K	5%	1/4W	
R843	1-247-903-00	CARBON	1M	5%	1/4W	
R846	1-249-441-11	CARBON	100K	5%	1/4W	
R847	1-247-891-00	CARBON	330K	5%	1/4W	
R848	1-247-887-00	CARBON	220K	5%	1/4W	
R849	1-249-429-11	CARBON	10K	5%	1/4W	
R850	1-249-425-11	CARBON	4.7K	5%	1/4W	
R851	1-247-755-11	CARBON	1.8K	5%	1/2W	F
R852	1-249-432-11	CARBON	18K	5%	1/4W	
R901	1-202-539-00	SOLID	39	10%	1/2W	
R902	1-202-539-00	SOLID	39	10%	1/2W	
R907	1-247-804-11	CARBON	75	5%	1/4W	
R916	1-249-397-11	CARBON	22	5%	1/4W	
R917	1-249-397-11	CARBON	22	5%	1/4W	
R1200	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1201	1-249-434-11	CARBON	27K	5%	1/4W	
R1202	1-249-393-11	CARBON	10	5%	1/4W	F
R1203	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1204	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1205	1-249-428-11	CARBON	8.2K	5%	1/4W	
R1206	1-249-428-11	CARBON	8.2K	5%	1/4W	
R1207	1-249-417-11	CARBON	1K	5%	1/4W	
R1208	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R1209	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R1210	1-249-417-11	CARBON	1K	5%	1/4W	
R1211	1-249-424-11	CARBON	3.9K	5%	1/4W	
R1212	1-249-424-11	CARBON	3.9K	5%	1/4W	
R1213	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1216	1-249-413-11	CARBON	470	5%	1/4W	
R1217	1-249-425-11	CARBON	4.7K	5%	1/4W	
		< VARIABLE RESISTOR >				
RV301	1-238-552-11	RES, ADJ, CARBON 470K				

REF.NO.	PART NO.	DESCRIPTION				REMARK
		< RELAY >				
RY600 !	1-515-720-31	RELAY				
		< SPARK GAP >				
SG801	1-519-422-11	GAP, SPARK				
		< TRANSFORMER >				
LF600 !	1-421-776-11	LFT				
LF601 !	1-421-776-11	LFT				
T601 !	1-426-805-11	TRANSFORMER				
T800	1-421-794-21	TRANSFORMER, FERRITE (PMT)				
T803 !	1-453-169-11	FBT ASSY (UX-1604A2)				
T804	1-437-090-00	HDT				
		< THERMISTOR >				
THP600 !	1-809-827-11	THERMISTOR, POSITIVE				
**********						
	*1-652-269-11	H2 BOARD ********				
		< CAPACITOR >				
C904	1-124-910-11	ELECT	47MF	20%	50V	
C905	1-124-907-11	ELECT	10MF	20%	50V	
		< CONNECTOR >				
CN907	*1-564-509-11	PLUG, CONNECTOR 6P				
CN907	*1-568-881-51	PIN, CONNECTOR 6P				
		< DIODE >				
D901	8-719-030-11	DIODE SLA-570KT3F				
		< IC >				
IC900	8-741-790-11	IC SBX1790-11				
		< RESISTOR >				
R900	1-249-409-11	CARBON	220	5%	1/4W	
R908	1-249-401-11	CARBON	47	5%	1/4W	
**********						
	*1-652-275-11	H1 BOARD ********				
		< CAPACITOR >				
C900	1-101-810-00	CERAMIC	100PF	5%	500V	
C902	1-137-372-11	FILM	0.022MF	5%	50V	
C903	1-137-372-11	FILM	0.022MF	5%	50V	
C907	1-124-903-11	ELECT	1MF	20%	50V	
		< CONNECTOR >				
CN900	1-569-793-11	TERMINAL BLOCK, S 3P				
CN906	*1-564-516-11	PLUG, CONNECTOR 13P				
		< SOCKET >				
J900	1-764-606-11	JACK				

The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

H1 H3

REF.NO.	PART NO.	DESCRIPTION	REMARK
		< COIL >	
L900	1-408-409-00	INDUCTOR 10UH	
L901	1-408-409-00	INDUCTOR 10UH	
L903	1-408-409-00	INDUCTOR 10UH	
		< RESISTOR >	
R905	1-247-804-11	CARBON 75 5% 1/4W	
R906	1-247-804-11	CARBON 75 5% 1/4W	
R910	1-249-437-11	CARBON 47K 5% 1/4W	
R915	1-249-397-11	CARBON 22 5% 1/4W	
**********			
	*1-652-270-11	H3 BOARD ********	
		< CONNECTOR >	
CN908	*1-564-506-11	PLUG, CONNECTOR 3P	
CN908	*1-568-878-51	PIN, CONNECTOR 3P	
		< RESISTOR >	
R911	1-249-423-11	CARBON 3.3K 5% 1/4W	
R912	1-249-429-11	CARBON 10K 5% 1/4W	
R913	1-249-423-11	CARBON 3.3K 5% 1/4W	
R914	1-249-429-11	CARBON 10K 5% 1/4W	
		< SWITCH >	
S900	1-692-979-11	SWITCH, TACTILE	
S901	1-692-979-11	SWITCH, TACTILE	
S902	1-692-979-11	SWITCH, TACTILE	
**********			
		MISCELLANEOUS **********	
⚠	1-402-746-11	COIL, DEGAUSSING	
⚠	8-451-311-34	DEFLECTION YOLK (Y25FXA)	
	1-504-698-11	SPEAKER	
	1-452-032-00	MAGNET, DISK; 10MM	
	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM	
⚠	1-751-680-11	CORD POWER (WITH NOISE FILTER) (KV-M2541A/M2540D/M2541D)	
⚠	1-590-460-11	CORD POWER (WITH CONNECTOR) (KV-M2540B/M2540E/M2541E/ M2540K/M2541K)	
⚠	1-590-762-11	CORD POWER (WITH PLUG) (KV-M2541U/M2541L)	
	1-693-185-11	TUNER (UV916H) (KV-M2541A/M2540B/ M2540D/M2541D/M2540E/M2541E/ M2541L/M2540K/M2541K)	
	1-693-184-11	TUNER (U944C) (KV-M2541U)	
	1-453-169-11	FBT ASSY (UX1604A2)	
V901 ⚠	8-733-231-05	CRT SD-178 (A59JWC61X)	

REF.NO.	PART NO.	DESCRIPTION	REMARK
		ACCESSORIES AND PACKING MATERIALS **********	
✱			
	1-202-829-41	MANUAL INSTRUCTION (KV-M2541A)	
	1-202-829-51	MANUAL INSTRUCTION (KV-M2540B)	
	1-202-829-11	MANUAL INSTRUCTION (KV-M2540D/M2541D)	
	1-202-829-81	MANUAL INSTRUCTION (KV-M2540E)	
	1-202-829-71	MANUAL INSTRUCTION (KV-M2541E)	
	1-202-829-91	MANUAL INSTRUCTION (KV-M2540K/M2541K)	
	1-202-829-61	MANUAL INSTRUCTION (KV-M2541L/M2541U)	
	*4-384-027-01	BAG, PROTECTION	
	*4-200-647-12	CUSHION (UPPER) (ASSY)	
	*4-200-648-13	CUSHION (LOWER) (ASSY)	
	*4-202-212-01	INDIVIDUAL CARTON	
		REMOTE COMMANDER **********	
	1-467-706-11	COMMANDER (RM-833)	
**********			